

Unit Strategic Fire Plan

*CAL FIRE/ Tulare Unit
MAY 2024*



TABLE OF CONTENTS

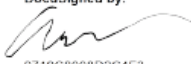
AMENDMENTS	i
TABLE OF CONTENTS	ii
SIGNATURE PAGE	1
EXECUTIVE SUMMARY	2
SECTION I: UNIT OVERVIEW	3
UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES	4
SECTION II: COLLABORATION	6
COMMUNITY/AGENCIES/FIRE SAFE COUNCILS	6
SECTION III: VALUES/COMMUNITIES	7
SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES	10
A. FIRE PREVENTION	10
B. VEGETATION MANAGEMENT	15
C. BATTALION/ PROGRAM AREAS	17
1. BADGER BATTALION-B4111	17
2. KAWEAH BATTALION-B4112	20
3. TULE BATTALION-B4113	27
4. FOUNTAIN SPRINGS BATTALION-B4114	32
5. PORTERVILLE AIR ATTACK BASE	37
6. TULARE FIRE CENTER/ FIREFIGHTER HANDCREW	38
7. MOUNTAIN HOME CONSERVATION CAMP	39
8. MOUNTAIN HOME DEMONSTRATION STATE FOREST	40
9. TRAINING BUREAU	44
APPENDIX A: PRE-FIRE PROJECTS	45
APPENDIX B: FUEL MODEL	47
APPENDIX C: LARGEST FIRES (PAST 50 YEARS)	48
APPENDIX D: IGNITIONS	49
APPENDIX E: FIRE HAZARD SEVERITY ZONE	52
EXHIBITS: MAPS	53
ANNUAL REPORT OF UNIT ACCOMPLISHMENTS	58

SIGNATURE PAGE:

Unit Strategic Fire Plan developed for Tulare Unit:

This Plan:

- Was collaboratively developed. Interested parties, Federal, State, City, and County agencies within the Unit have been consulted and are listed in the plan.
- Identifies and prioritizes pre-fire and post fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.
- Is intended for use as a planning and assessment tool only. It is the responsibility of those implementing the projects to ensure that all environmental compliance and permitting processes are met as necessary.

DocuSigned by:

9719C8008D2C4F3...

5/7/2024

Unit Chief

Date

Andy Turner

DocuSigned by:

99E0A7BE3E4F45D...

5/7/2024

Pre-Fire Engineer

Date

Nick Shew

EXECUTIVE SUMMARY

The Tulare Unit (TUU) is one of 21 administrative Units within CAL FIRE. The Tulare Unit Strategic Fire Plan is a product of the implementation of the California State Fire Plan. The TUU Strategic Fire Plan was completed by a collaborative effort between the Unit Chief, Battalion Chiefs, Program Managers, Bureau Managers, and various stakeholders in the Unit. This process provided TUU background information on fuels and fire data, current and proposed projects, and individual Battalion activities commonly carried out each year. The TUU Strategic Fire Plan is our local road map to create and maintain defensible landscapes to protect vital assets. The Fire Plan seeks to reduce firefighting cost and property loss, increase public and firefighter safety, minimize wildfire risk to communities and contribute to ecosystem health.

This Unit Strategic Fire Plan emphasizes State Responsibility Land within CAL FIRE jurisdiction. The Fire Plan will be a tool to assist the Unit with pre-suppression projects which exist within each Battalion. TUU plans, identifies, and evaluates priority landscape, fire hazards, and wildfire risk. Additionally, it identifies opportunities for reducing structural ignitability, and identifies potential fuel reduction projects and techniques for minimizing those risks.

The TUU Strategic Fire Plan is our dynamic planning tool and intended to be a living document. While we plan for and develop new projects, our primary focus will be to obtain funding for the maintenance of the existing projects and pre-suppression infrastructure that is in place. This document will be updated each year on the successes that have been accomplished and new goals and objectives as outlined by the Unit and the California Strategic Fire Plan.

The Tulare Unit Key Goals and Objectives from the California Strategic Fire Plan:

- Support the implementation and maintenance of defensible space inspections around structures.
- Analyze trends in fire cause and focus prevention and education efforts to modify behaviors and effect change to reduce ignitions within Tulare County.
- Continually evaluate the success in achieving the 95% threshold of keeping fires less than 10 acres in size.
- Identify and evaluate wildland fire hazards and recognize assets at risk, collecting and analyzing data to determine fuel reduction project, and other projects.
- Support the availability and utilization of CAL FIRE resources, as well as public and private sector resources for fuels management activities, including ongoing maintenance.
- Assist landowners and local government in the evaluation of the need to retain and utilize features (e.g., roads, fire lines, water sources) developed during fire suppression efforts, taking into consideration those identified in previous planning efforts.

SECTION I: UNIT OVERVIEW

UNIT DESCRIPTION

Tulare Unit is in Tulare County in the San Joaquin Valley of Central California. Across the county the fire response responsibility areas consists of 599,086 acres of State Responsibility Area (SRA), 908,328 acres of Local Responsibility Area (LRA), and 1,591,911 of Federal Responsibility Area (FRA), a combined total of 3,099,325 acres. Through Interagency agreements the Direct Protection Area (DPA) differs from the Responsibility Area 621,139 State DPA, 913,845 Local (DPA), and 1,564,197 Federal DPA. CAL FIRE Tulare Unit is bordered on the east by Sequoia and Kings Canyon National Parks, and Sequoia National Forest. The counties of Kern, Kings and Fresno border to the South, West, and North respectively. The elevation of Tulare Unit land receiving direct protection by CAL FIRE ranges from 200 feet along the county's western boundary to a highest point of 9,252 feet on Moses Mountain to the East. This wide range of elevation supports many areas of vegetation consisting of grass, oak woodland, brush, and forests from mixed conifer to sub-alpine, including old growth Giant Sequoia. For the Tulare County Fuel Models see Appendix C.

Average annual temperatures range from 50 to 75 degrees; with low 20s during the winter months and highs exceeding 100 degrees for extended periods during the summer months. The rainy season is October through April; the average annual rainfall is 9.1 inches. Summers can be hot with extremely warm temperatures and dry relative humidity lasting for weeks. During the summer, North American Monsoonal season thunderstorms are not uncommon over the higher elevations with some extending out over the Sierra Foothills and valley floor. Some years a monsoonal push will work from the southwest heading northeast causing thunderstorms with associated lightning and scattered precipitation on the valley floor and foothill region.

The United States Census Bureau in 2021 estimates Tulare County's population at 470,999. Most the population in the state responsibility area is located along two east-west highways. Highway 198 which leads to the Sequoia / Kings Canyon National Parks and Highway 190 which accesses a significant portion of the Sequoia National Forest/Giant Sequoia National Monument. Tulare Unit continues to experience a population growth rate of approximately 1 percent annually. Along with the population increase, wildland urban intermix has significantly increased where structures are being built throughout wildland areas. Providing adequate fire protection to those structures has become a major undertaking. However, the Tulare Unit has a low frequency of large damaging fires. CAL FIRE strives to extinguish 95% of all wildland fires at 10 acres or less. For the top ten largest fires over the past 50 years see Appendix D.

Tulare Unit's Strategic Fire Plan is our mechanism to catalog potential hazard areas and develop prescriptions to begin mitigating them based upon assessed priorities.

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES

TUU Facilities:

TUU Headquarters is located just off Highway 198 in Visalia. At peak fire season, the Unit staffs 8 fire stations, an air attack base including one fixed wing air attack and two air tankers, an Inmate Conservation Camp with 2 year-round hand crews, the Tulare Fire Center with 7 staffed firefighter hand crews, Emergency Command Center, Fire Prevention Bureau, Training Bureau, 2 dozers / transport combinations and 2 Registered Professional State Foresters.

The following is a list of TUU's facilities, equipment, and overhead personnel by battalion.

Badger Battalion

Badger Station	1-Type III Engine
Woodlake Station	1-Battalion Chief 1-Type III Engine 1-Dozer / Transport

Kaweah Battalion

Visalia Station	1-Type III Engine
Three Rivers Station	1-Battalion Chief 2-Type III Engines

Tule Battalion

Porterville Station	1-Battalion Chief 1-Type III Engine 1-Dozer / Transport
Bear Creek Station	2-Type III Engines

Fountain Springs Battalion

Fountain Springs Station	1-Battalion Chief 2-Type III Engines
Railroad Canyon Station	1-Type III Engine

Tulare Fire Center

Porterville Developmental Center	7-Type I/II IA FF Hand Crews
---	------------------------------

Mountain Home Conservation Camp

Mountain Home Camp	1-Division Chief 5-Type I IA Hand Crews
---------------------------	--

Emergency Command Center

Visalia Headquarters	1-Battalion Chief 5-Fire Captains 2-Comm Operators 1- Comm Op Supervisor
-----------------------------	---

UNIT PREPAREDNESS AND FIREFIGHTING CAPABILITIES CONTINUED:

Tulare Unit has MUTUAL AID AGREEMENTS with the following Departments:

- Tulare County Fire Department (TCFD)
- United States Forest Service (SQF)
- National Park Service (Sequoia & Kings Canyon)
- Tule Indian Reservation (TIA)
- Porterville City Fire Department (PFD)
- Farmersville Fire Department (FFD)
- Woodlake Fire Protection District (WLF)

SECTION III: VALUES

A: VALUES

The Unit description contained in this Strategic Fire Plan provides the background for identifying TUU's Assets at Risk. Additionally, CAL FIRE's Fire and Resource Assessment Program (FRAP) prepared the document entitled California's Forest and Rangelands: 2017 Assessment. This assessment identifies the Unit Priority Landscapes. Priority Landscapes are intended to focus investments and other programs to address issues such as fire threat to ecosystem health, rangeland fire threat, and post fire erosion threat to community water. Each of the programs in TUU is geared to protect or enhance the assets. The following list provides a summary of TUU's Assets at Risk:

Life and Safety

The loss of life and disregard for safety is the ultimate price paid. One ounce of prevention is little compared to any injury or a loss of life. This is based on population density and makeup of the communities. The fire size, location, and rate of spread could prove detrimental.

Air Quality

The topography of the San Joaquin Valley air basin, the reliance on fossil fuels, and the seasonal weather patterns have created the conditions for significant air quality issues. Smoke from wildfires add to the already poor air quality conditions in the Unit, which can have negative health impacts. The potential is damage to health, vegetation, and visibility. This is ranked on vegetation type and the air movement. The unit is working to mitigate air quality impacts using fuels treatments and prescribed fires.

Range Productivity

Agriculture is the primary industry in Tulare County and in the Unit. Cattle ranches and rangeland encompass hundreds of thousands of acres in the Unit. Fuel's reduction and prescribed fire can increase rangeland production, but wildland fires can burden cattle ranchers when they are forced to purchase feed to replace that lost in a wildland fire. The dollar cost to replace feed per acre will vary depending on the regions, owners, and feed.

Structures

There is a wide variety of structure types in the Unit. The effect of fire would depend on the housing density and the exposure (potential for structure loss in a large fire event). The cost would not only be to the average dollar lost per home but the non-commodity assets as well.

Timber

There are millions of board feet of merchantable timber in the Unit. As forests trees provide innumerable ecosystems services. From the blue oak woodlands at lower elevations in the SRA to the Giant Sequoia and Red Fir forests in Mountain Home State Demonstration Forest, trees provide the following ecosystem services:

- Regulate temperature and provide shade
- Filter air pollutants
- Sequester carbon
- Manage and filter rainwater
- Stabilize soil
- Maintain soil health
- Provide food and shelter for living organisms
- Improve people's mental, physical, and well-being
- Improve recreation and aesthetics

Water and watersheds

From North to South the major watersheds in the Unit are Kaweah River, Tule River, and the White River. Prior to the installation the dams the Kaweah and Tule Rivers would flow into Tulare Lake. Tulare Lake was the largest freshwater lake west of the Mississippi River prior to it being drained and convert to agricultural fields. Initially installed to manage flooding the dams are used to store water from the spring snow melt run off for later use by the agricultural industry. A fire could increase water yields but could cause significant damage to the ecosystem and water ways. Vegetation Management Plans are the key to watershed management. The fuels reduction and low intensity fire prescribed in VMP's can create habitat mosaics that decrease the risk of catastrophic wildfires. Landslide can follow catastrophic wildfires, this could impact the County's water systems, which could impact agricultural production which given the right conditions can lead to landslides.

B: COMMUNITIES

The communities in the Unit that are at risk and are recognized on both the State and National levels are:

Badger	Camp Nelson	Exeter
East Porterville	Kennedy Meadows	Lindsay
Poso Park	Pine Flat	R Ranch
Tule River	Wilsonia	Tule River Indian Reservation
Springville	Three Rivers	

The communities that are not recognized at the state and national levels are:

Balance Rock	Blue Ridge	Elderwood
Campbell Creek	Fountain Springs	Hartland Camp
Hammond	Jack Ranch	California Hot Springs
Kaweah	Lemon Cove	Mehrten Creek
Posey	Sugar Loaf Village	Sierra Glen
Woodlake		

SECTION IV: PRE-FIRE MANAGEMENT STRATEGIES

A: FIRE PREVENTION

The Tulare Unit fire prevention program accomplishes fire management goals using four primary resources. These resources are law enforcement, Pre-Fire Engineering, education, and volunteerism.

Throughout CAL FIRE's history, our officers have worked in partnership with the community along with our cooperators to provide the highest level of safety, service, and security while protecting the natural resources of the state of California, through enforcement of forest and fire laws. Our officers hold persons accountable who ignite fires through violations of law and/or negligence as well as those who violate the Forest Practice Act. CAL FIRE Peace officers conduct patrol, investigate fires, investigate reports of forest and fire law violations, make arrests, issue citations, conduct surveillance operations, collect, and preserve evidence, and testify in court. Peace officers have Statewide authority and although their primary function is to enforce forest and fire laws, they may be called upon to enforce any of California's laws.

Pre-Fire Engineering works with property owners, stakeholders, fire safe councils, resource conservancy and through local districts in planning fuel reduction projects, Vegetation Management Plans (VMP), California Vegetation Treatment Program (CalVTP), and fire safe projects.

Education and outreach are accomplished by the Units Fire Prevention Specialist. Activities include annual first grade school visits, fire prevention floats in local community parades, various community functions and staffing the Tulare County Fair booth. Volunteerism is supported through Volunteer in Prevention (VIP) program, which uses local volunteers to assist with public information, represent CAL FIRE at public events, and correspond with the public with CAL FIRE's mission in mind. Each program area's goal is to allow the prevention program to be successful and functional Unit wide.

Civil Cost Recovery

CAL FIRE's Civil Cost Recovery Program recovers fire suppression costs when a fire investigation reveals that the responsible party caused the fire negligently or in violation of law. This benefits the State in two ways: it assigns fire suppression costs to culpable parties rather than the taxpayers at large, and it serves as a deterrent to carelessness that can result in destructive fires. All fires meeting the above criteria are forwarded to Southern Region Office for review and civil cost collection.

Pre-Attack Plans: The department needs updated maps utilizing GIS technology to capture all roads, fuel breaks, water locations, staging locations, Heli-spots, and plot probable control lines. Possible strategies for fire suppression could be pre-determined utilizing fire history, typical fire weather and fire behavior models. Distribute the maps so equipment from other stations / areas can efficiently function within the Tulare Unit.

ENGINEERING & STRUCTURE IGNITABILITY

The Prevention Bureau, through its Fire Captain / Pre-Fire Engineer position supports and collaborates with a wide variety of agencies and community members in the planning, organizing, and documentation of fuel reduction projects throughout the Unit.

Starting in 2018 the Pre-Fire Engineer began the process of implementing the State Board of Forestry and Fire Protection's new 2018 Strategic Fire Plan for California. Under that document this Unit Fire Plan attempts to record all efforts within the Unit to mitigate the threat posed by wildland fire. The primary focus is on projects designed to create fuel breaks adjacent to threatened communities and help private landowners and organizations reduce the threat within their property boundaries.

In Tulare Unit, the wildland urban interface (WUI) continues to grow. TUU contains a variety of land uses and types, from agriculture to forest. Commercial and residential structures are present throughout these land use types. The communities within the confines of the Tulare Unit have always been confronted by the threat posed by uncontrolled wildland fire. The structures within the Unit reflect well over one hundred years of acceptable building materials and techniques. State law establishes certain requirements for building in the WUI that effect structure placement and decrease structure ignitability. Construction types, ignitability of materials and proper engineering are all critical when wildland fires encounter structures.

It is a fact recognized by all fire control personnel that any ignition can quickly result in a fire that immediately threatens structures. Whether it is 1,100, or 1,000 acres, structures can be threatened. In the case of small rapidly growing fires, ignition can be from direct flame impingement and/or radiant heat. In the case of large landscape scale fires, a means of ignition could be airborne embers. Recognition of this fact by property owners should encourage them to take personal responsibility for improving the safety of their structures by following the steps required and/or recommended to reduce the threat of structure ignition.

Tulare Unit also enforces the LE-100 program (Fire Hazard Inspections). All structures in the State Responsibility Area are inspected. Homeowners who do not comply with the Public Resource Code (PRC) 4291 are cited. The idea behind the program is not to issue a citation but prevent the loss of structures when fire is moving through a community by receiving compliance. There were 8,468 property inspections completed in 2023.

The California Building Commission (CBC) adopted the Wildland-Urban Interface codes (Chapter 7A) in late 2005. Many of the new requirements took effect in 2008. These new codes include provisions for ignition resistant construction standards applicable to the WUI, which emphasizes protecting against airborne embers. During this same period, CAL FIRE initiated a statewide project to update the Fire Hazard Severity Zone (FHSZ) designations within the WUI. Starting with the State Responsibility Areas in 2005 and concluding with Local Responsibility Areas adjacent to or within the SRA in 2008. Fire Hazard Severity Zones were field validated, updated as required and adopted by local government (County and City governing and regulatory entities) before official CAL FIRE maps were produced and released to local government. For Fire Hazard Severity Zones see Appendix F.

The requirements in Chapter 7A of the CBC and the associated FHSZ's have been enacted and are being enforced by local government building officials as new development plans work their way through the approval process. Property owners will also use the updated zones to comply with Natural Hazards Disclosure requirements at the time of a property sale. Local government is encouraged to integrate the updated FHSZ's into the Safety Element of their General Plans. Property owners, developers, contractors, building materials businesses, and product designers can find specifics and answers to questions regarding California Building Code Chapter 7A, Fire Code Chapter 47, PRC 4290 and 4291,

and Title 14, 19, 24 and other related information at the CAL FIRE Office of the State Fire Marshal.

INFORMATION AND EDUCATION

Information & Education is an integral part of the Fire Prevention Program. The focus is to reach out to the elementary school children with match & lighter safety education. In addition to the school programs, it is imperative to educate the public on the importance of Defensible Space clearance, the proper method to burn hazard reduction materials, and the correct times to use power equipment.

The fire safety program that instructs children not to play with matches, lighters, or fire is a “Team Teaching” program. Team Teaching Targets Preschool through second grade. Team Teaching is a highly professional program developed by teachers, CAL FIRE personnel, USFS personnel, and child psychologists. This program utilizes Smokey Bear, an internationally recognized fire prevention symbol and the newest member to the CAL FIRE Team, Captain CAL, to instruct children not to play with matches, lighters, or fire. Pre-planning is the most crucial factor for a successful team-teaching program. The Fire Prevention Specialist utilized various social media platforms to continue to share fire prevention messages with the public.

The first step in planning a fire prevention program is to identify what the Unit’s priorities are. Review the Unit Fire Plan to determine what fire causes occur in the target areas. For example, children match caused fires may have dropped in occurrence due to heavy saturation of schools with “Team Teaching” and other school education programs over the years, while “equipment uses” or “debris burning” caused fires to have increased. This would indicate a change in priorities. The Unit could then choose to develop an annual maintenance program for “Team Teaching” and redirect emphasis on “equipment uses” and “debris burning” programs or assign additional personnel to assist with the implementation of programs to meet those needs in targeted areas.

The Tulare County Fair was held this year after being shut down due to the COVID pandemic. These functions continue to be an effective method of conveying the fire prevention messages to the public. Tulare Unit personnel educate the public and allow children to cut a log and brand Smokey the Bear into the piece they cut. Based on ignitions in the Unit our prevention message can change year to year.



Figure 1 Captain CAL assisting at the Tulare County Fair.

Defensible Space

The department has instituted an easy-to-use defensible space inspection known as the LE-100a. This form is accessed by our inspectors utilizing the "Collector App" via handheld electronic tablets. It contains detailed explanations of violations and how to correct them. Used by agency inspectors alike, it is checkbox format acts as a detailed guide for inspectors and a prompt for veteran inspectors while minimizing the amount of writing required, speeding up and standardizing inspections. During inspections, we encourage discussions with property owners about property issues.

Property owners living in State Responsibility Areas (SRA) are required by Public Resource Code (PRC) 4291 to maintain clearance of flammable vegetation around their property. A property owner's responsibility is to clear one hundred feet from his or her structure(s) or to the property line, whichever is closer, and is limited to their lands. However, coordination with adjacent landowners to achieve maximum defensible space is encouraged. Short of expensive remodel and retrofit projects for existing structures, compliance with existing PRC 4291 requirements is the single most effective means by which property owners can reduce the likelihood of fire damage.

PRC 4291 clearance requirements: a thirty feet wide Defensible Space zone immediately adjacent to the structure, plus an additional seventy feet Reduced Fuel zone, for a total of one hundred feet of clearance around all structures. The Prevention Bureau and each Battalion in the Unit is actively engaged in PRC 4291 education and compliance efforts, including: on-sight inspections, self-inspection forms, face to face education at the fire stations, participation in community events, close cooperation with Home/Property Owner Associations, and collaborative efforts with the local Fire Safe Councils, Local and Federal Government Fire Agencies and land management agencies.

Volunteer in Prevention Program

The VIP Program utilizes citizens and public service groups to volunteer time in non-salaried positions to reduce man-caused fires. Each year our VIP's play a vital role; they assist with staffing public events and emergency mitigation efforts. Each year VIP's assist by participating in fairs, displays, school programs and parades.

Fire Prevention Roadside Sign Program

Battalion staff will continue promoting the fire prevention message based on our current ignition problems via the 4'x8' roadside signs. The signs are placed in high traffic areas in every battalion. There are 6 in the Badger Battalion, 5 in the Kaweah Battalion, 5 in the Tule Battalion, and 3 in the Fountain Springs Battalion. These are primary entry points for commuters, part-time residents, and visitors to Tulare County. These highways and roads experience a large volume of traffic, making it an excellent point from which to publicize our fire prevention messages. This is an annual program in which signs are posted throughout the fire season. Tulare Unit is currently in the process of adding five to six additional roadside prevention signs in strategic areas within the SRA. We are in the planning phase of upgrading the wooden frames to metal frames to lower maintenance costs caused by either vandalism or weather-related deterioration.



Figure 2 Fire Prevention sign in the Tule Battalion

B. VEGETATION MANAGEMENT

Natural Resource Management is supporting the TUU Fire Plan through Forest Practice activities, the Vegetation Management Program, and other fuel reduction grants. Through the Forest Practice Program, we are encouraging healthy forest throughout the Unit. Landowners as well as local Registered Professional Foresters are currently reducing overcrowded timber stands. Timber Harvest Plans (THPs) are implementing this. Reducing the amount of high fire vegetation and providing an opportunity to fight fire safely and aggressively is the primary goal. These programs also help increase the water table by reducing the amount of evapotranspiration. Reducing the amount of hazardous brush will increase the amount of forage for livestock wildlife. These projects help bring the natural mosaic back to the landscape.

In 2023, the Tulare Unit treated a total of 1,630 acres from various fuel reduction projects across the county. 1,565 acres of those acres were achieved through broadcast burning. These projects include the Crawford Corral VMP within the Badger Battalion; Gill Range Improvement Burn, Grouse Fire Control Road Right of Way project, Upper Grouse ROW, and the Herbert Burn located in the Kaweah Battalion; Merritt VMP, Porterville Development Center Fuels reduction, Lewis Hill and Rock Plant roadside burns and the Success Burn located in the Tule Battalion; as well as the Posey VMP located in the Fountain Springs Battalion. Additionally, 7 ½ miles of handline was cut along Lake Kaweah in the Kaweah Battalion.

A total of 18,484 personnel hours and 3,420 equipment hours were recorded for the above projects. The scope of work consisted of thinning vegetation, mastication, manual and mechanical piling, limbing and bucking, lop and scatter, pile burning, and broadcast burning.

Tulare Unit Proposed projects:

The Tulare Unit currently has 10 new proposed projects, some of which will be grant funded projects within the unit under the (CAL FIRE) Climate Investments Fire Prevention Grants Program (CIFPGP). All projects are projected to be awarded to the Tulare County RCD either through the CIFPGP or through the CAL FIRE Directors Awards. The proposed projects are as follows:

Project Name: Grouse VTP

Description: Vegetation Treatment Project in the Grouse Valley Area
Community: Three Rivers, Springville
Project Collaborators: CAL FIRE

Project Name: Rocky Hill Roadside Burn

Description: Roadside burn of the County Right of Way along Rocky Hill, Meyer Drive and Yohkol Valley Road.
Community: Exeter
Project Collaborators: CAL FIRE, TCFD

Project Name: Fraiser Valley Roadside Burn

Description: Roadside burn along Fraiser Valley Road from the SRA boundary to Holdridge Drive.
Community: Strathmore, Springville
Project Collaborators: CAL FIRE, TCFD

Project Name: Johnson Drive Roadside Burn

Description: Roadside burn along Johnson Drive.
Community: Orosi
Project Collaborators: CAL FIRE, TCFD

Project Name: Mountain Home VTP

Description: Vegetation Treatment Project for Mountain Home Demonstration State Forest

Community: Mountain Home Demonstration State Forest

Project Collaborators: CAL FIRE

Project Name: Stagecoach VTP

Description: Vegetation Treatment Project in the Cedar Creek Drainage that ties Shadequarter VMP in with the Mankin VMP.

Community: Badger

Project Collaborators: CAL FIRE

Project Name: Bear Mountain VMP

Description: Vegetation Management Project around Bear Mountain.

Community: Badger

Project Collaborators: CAL FIRE

Project Name: Pierpoint Fuel Break

Description: Fuel break around the community of Pierpoint.

Community: Pierpoint Springs, Camp Nelson

Project Collaborators: CAL FIRE, Tulare County Fire, Tulare County landowners in the SRA, Sequoia Fire Safe Council, United States Forest Service

Project Name: Tule Indian Reservation

Description: Fuels Reduction on the Reservation and neighboring lands affected by the Windy and Castle Fires.

Community: Tule Indian Reservation

Project Collaborators: CAL FIRE, Tule Indian Reservation, BIA, Tulare County Fire, TCRCD, Sequoia Fire Safe Council, and other local stakeholders

Project Name: Sequoia Crest Fuel Break

Description: Fuels Reduction and creation of fuel break in tree mortality areas

Community: Sequoia Crest

Project Collaborators: CAL FIRE, USFS SQF, Tulare County Fire, Tulare County Resource Conservation District, Tulare County landowners in the SRA, Sequoia Fire Safe Council, and other local stakeholders

Project Name: Camp Nelson Fuel Break

Description: Fuels reduction around the mountain community of Camp Nelson

Community: Camp Nelson

Project Collaborators: CAL FIRE, USFS SQF, Tulare County Fire, TCRCD, Tulare County landowners in the SRA, Sequoia Fire Safe Council, and other local stakeholders.

BADGER BATTALION – 4111

Fuels:

The fuels within the Badger Battalion are typical of those found in the foothill and mountain regions of the Southern Sierra Mountain Range. Vegetation types range from annual grasses, near the valley floor, to mixed conifer forest at the higher elevations. Below 500' elevation annual grasses, including wild oats, are the pre-dominant fuel type. Fuel loading in this area changes from year to year based on the amount of precipitation received. Between 500'-3500', the fuel type becomes more oak woodland with an inter-mix of brush. The brush is made up of several varieties including manzanita, chemise, ceanothus, scrub oak, live oak, and poison oak. The brush becomes denser with the rise in elevation and on the North and East aspects. Above 3500' elevation, fuels transition to a Conifer fuel type. At 4500' elevation and above, the fuel is dominated by conifer species such as incense cedar, ponderosa pine, sugar pine, white fir, live oak, and black oak with a mixed brush understory.

The past years of drought have had a profound effect on the conifer component in the vegetative regime. Of particular concern is the high occurrence of mortality in both pine species and incense cedar. Ocular estimates in December 2015, show some areas that exhibit mortality rates exceeding 95 percent of the standing trees. Mortality is occurring in all size and age classes which is manifest in the form of extensive areas of ladder fuels which extend from the forest floor into the dominant canopy layer.

Topography:

There are a wide range of topographical features that vary in elevation from 400' to near 5000'. The lower elevations are comprised of rolling foothills, while the upper elevations contain mountainous terrain with steep drainages, rugged canyons, and a few gentle valleys. Dry Creek and Cottonwood Creek are the major drainages in the area.

Weather:

Being a Mediterranean Climate, the typical summer weather pattern consists of 90 – 105 degrees with humidity's in the upper teens to low 20's during the day. At night, the temperature is in the upper 50's to near 70 degrees with humidity in the high 30's to low 50's. Winds are generally light with upslope, up canyon during the day and downslope, down canyon at night.

Fire History:

The Badger Battalion averages approximately 5-10 fire starts annually. Most of those fires started are due to vehicle and equipment use in the lower grasslands. Although rare, starts in the upper elevations within the battalion do pose a significant potential for a large extended attack fire. Large extended attack fires have occurred in the battalion over the years with several fires in the 500 –1000-acre range.

2023 Badger Battalion Accomplishments



Figure 3 CAL FIRE Prescribed Burn

The Badger Battalion was able to make exceptionally good progress this year on the Crawford Corral Project. We logged over 5,000 personnel hours.



Figure 1 CAL FIRE Dozer clearing brush.

We have continued the maintenance of Fire Control Roads. CAL FIRE personnel, equipment and fire crews are utilized in all aspects for the maintenance and repair of these vital roads. CAL FIRE bulldozers, backhoes and road graders repair damaged roads and maintain a drivable surface.

Battalion personnel continue to be proactive with residential clearance inspections (PRC 4291) which requires the 100-foot clearance around all structures within the SRA. We have placed Fire Prevention Signs throughout the Battalion in high traffic areas reminding the public to prepare for fire season by clearing flammable vegetation from their property.



Figure 2 CAL FIRE Defensible Space Inspectors educating property owners on Defensible Space.

Battalion Priority:

We now have numerous funded projects in the Battalion and have also added three additional to this year's plan that we anticipate working on. These three additional projects would give the Unit a continuous fuel break between the Fresno County line and Three Rivers.

Battalion Projects:**Priority #1**

Project Name: Crawford Corral VMP

Description: Vegetation Management Project starting at Eshom Valley Road and extending towards Shadequarter Lookout.

Community: Badger and Eshom Valley

Project Collaborators: CAL FIRE

Priority #2

Project Name: Johnson Drive Roadside Burn

Description: Roadside burn along Johnson Drive.

Community: Orosi

Project Collaborators: CAL FIRE, TCFD

Priority #3

Project Name: Eshom VMP

Description: Vegetation Management Project North of Eshom Valley Road.

Community: Badger, Eshom Valley and Hartland.

Project Collaborators: CAL FIRE, Tulare County RCD

Priority #4

Project Name: Badger Chipping Day

Description: Provide a chipping day at Badger FFS for residents of the Badger/Eshom Valley area to be able to dispose of their LE-100 material.

Community: Badger and Eshom Valley

Project Collaborators: CAL FIRE, Fire Safe Council

Priority #5

Project Name: Hartland Camp

Description: Fuel modification with hand crews

Community: Badger, Sierra Glen, Eshom Valley, Hartland Christian Camp.

Project Collaborators: CAL FIRE, Hartland Christian Camp, USFS, Fire Safe Council.

Priority # 6

Project Name: Stagecoach VTP

Description: Vegetation Management Project in Cedar Creek Drainage

Community: Badger

Project Collaborators: CAL FIRE

Priority #7

Project Name: Bear Mountain

Description: Vegetation Management Project between Buzzard Roost Fire Control Road and Hwy 245

Community: Badger

Project Collaborators: CAL FIRE

KAWEAH BATTALION – 4112

Fuels:

The fuels within the Kaweah Battalion are typical of those found in the Central California San Joaquin Valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology, and land use patterns within this region determine the vegetation patterns. Vegetation within the Kaweah Battalion varies from annual grasses and forbs on the valley floor to mixed conifer forest at the higher elevations. The lower elevations manifest annual grasses, including wild oats, and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to an Oak Woodland fuel type with brush becoming more prevalent along with pockets of gray/bull pine starting around the 2000' level. The brush component is made up of several species, including, but not limited to manzanita, chemise, scrub oak, live oak and poison-oak. The brush is interspersed with black oak and live oak, buckeye trees and sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3500' where it blends into the Conifer Belt with scattered oaks, brush and conifer trees. At about 4500' conifers become the dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes bear clover, lotus, chinquapin and whitethorn.

Topography:

The Kaweah Battalion is typical of most of the foothill areas in the Southern Sierra Nevada Range and encompasses a large portion of the Kaweah drainage and the Cottonwood Creek drainage. The Topography ranges from gentle rolling foothills above the Central Valley floor at 400' elevation to steep river drainage along Kaweah River. Major ridges and mountains are separated by small ravines, rugged canyons, and a few gentle valleys with elevations within the State Responsibility Area topping out near the 5000' elevation range.

Weather:

Typical summer weather patterns consist of 90 – 105-degree days with humidity's in the upper teens to low 20's and nights in the upper 50's to near 70 degrees with humidity in the high 30's to low 50's. Winds are generally diurnal, up slope, up canyon generally around 10am and switch to down slope, down canyon shortly before sunset. The winds can be upwards of 10mph and tend to have a heavy influence on fire behavior.

Fire History:

The Kaweah Battalion averages approximately 8-15 fire starts annually. The majority of fires started are due to vehicle or electrical power in the lower grasslands. Lightning tends to be a common fire cause in the higher elevations. Although rare, starts in the upper elevations within the Battalion do pose a significant potential for a large extended attack fire. Large extended attack fires have occurred in the Battalion over the years with several fires in the 500 – 1000-acre range. 3 Type 1 Incident Management Team activations in the Tulare Unit impacted or took place in the Kaweah Battalion being the Case Mountain fire in 1987 and the Kaweah Fire in 1996. In 2020 the SQF Complex burned 174,178 acres and had an impact to areas of the community with mandatory evacuations that lasted over a week. In 2021 the KNP Complex burned 88,307 acres also impacted the East Fork and North Fork drainages.

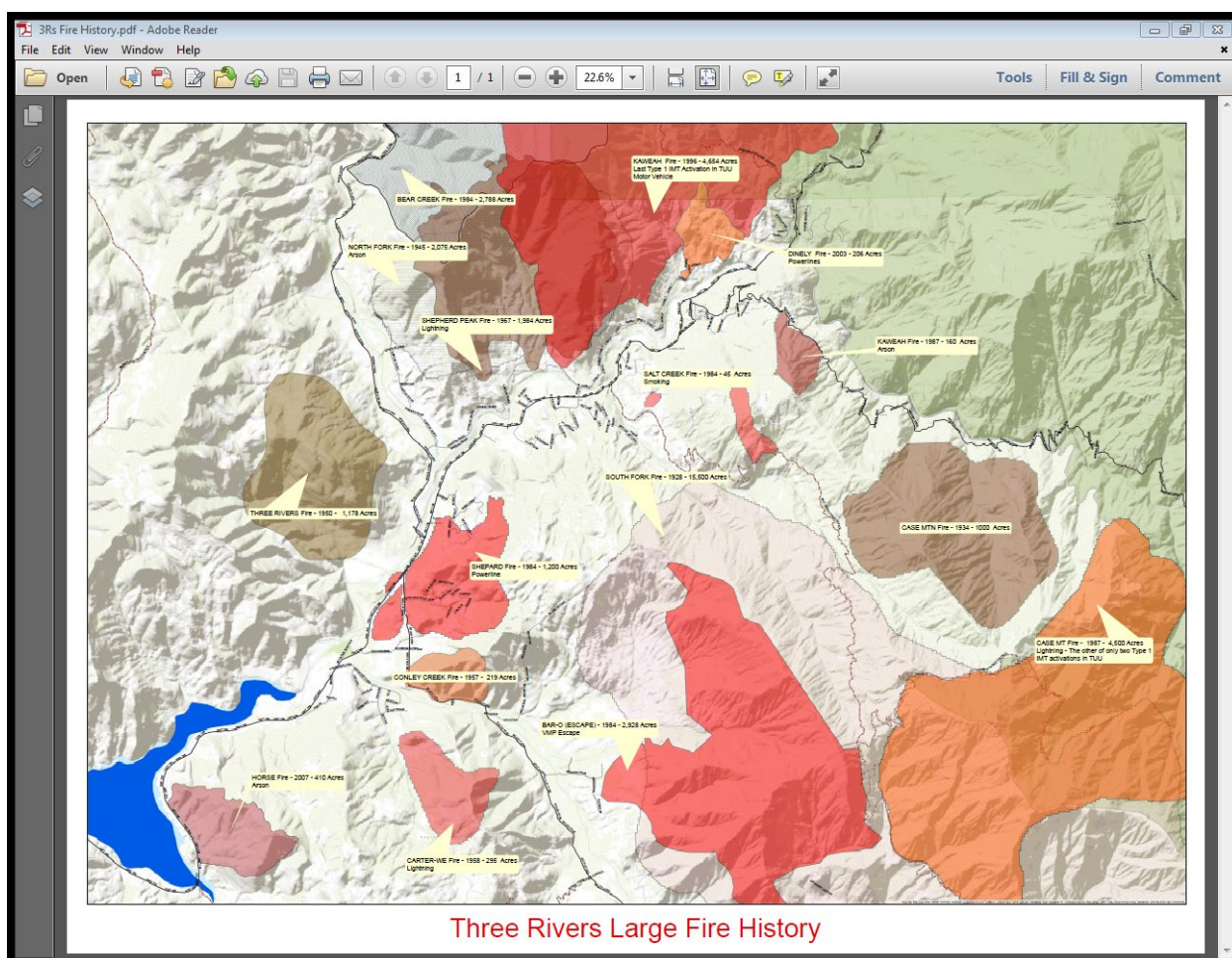


Figure 3 Three Rivers large fire history

2023 Kaweah Battalion Accomplishments

The Kaweah Battalion accomplished several projects in 2023. One of the major continuing projects is fire road maintenance. Fire roads were identified as a priority in the past 5 year's fire plans. In 2023 fire suppression staff spent hundreds of hours making sure all fire roads in the battalion were inspected, brushed, and had serviceable culverts cleared.

Grouse Road Fuel Project– Mtn Rd 319 fuel reduction project took place in spring 2023. The scope of the project included fuel reduction 30 feet off road centerline, both horizontally and vertically through thinning, brushing, liming up, and chipping. The intent for the project was to improve the condition for access and egress for first responders and residents in case of a wildland fire emergency.

Fire Control Road Repair- Heavy atmospheric rainstorms in 2023 adversely impacted and damaged multiple FCR (Fire Control Roads) within the Battalion. The repair of these critical infrastructure roads took hundreds of hours to repair. By ensuring these road systems are well maintained, it allows us to access areas within the Battalion that would otherwise be difficult to access. Although the fire roads are necessary for access, they also serve as fuel breaks and need to be maintained as such.



Escape Routes and Shelter-In-Place Locations – Previous fire plans have identified a concern with escape routes and shelter locations in the Three Rivers area. In 2019 the Tulare County Fire Department identified escape routes and shelter locations for all areas of the community. The plans are published and were distributed to the cooperating agencies. In 2023 fire crews were successful in continuing vegetation treatment on Mountain Road 319, North Fork Drive, and Mineral King Road, this directly supports evacuation escape routes for residents. There are multiple future projects to support the escape routes hardening in the community of Three Rivers.

Evacuation Route Risk Analysis

Excess fuel loads along escape routes have been identified as an issue in areas of Three Rivers (CAL FIRE TU 2024). Fuel loads along such roads could potentially compromise evacuation should a fire emergency occur. In addition, road grade, curvature, length, surface material (e.g. paved vs. unpaved), connectivity (e.g. local access road vs. main transportation corridor), stability (e.g. bridged vs. unbridged), and adjacent structure density contribute to potential evacuation complications.

The map to the right shows the level of risk in the roads present in the planning area.

Road Risk Score
Low
Medium
High
Extreme

The main transportation corridors, (e.g. Sierra Drive and South Fork Drive, received a low-risk rating whereas smaller residential roads (e.g. driveways and local access roads) received a higher risk rating.

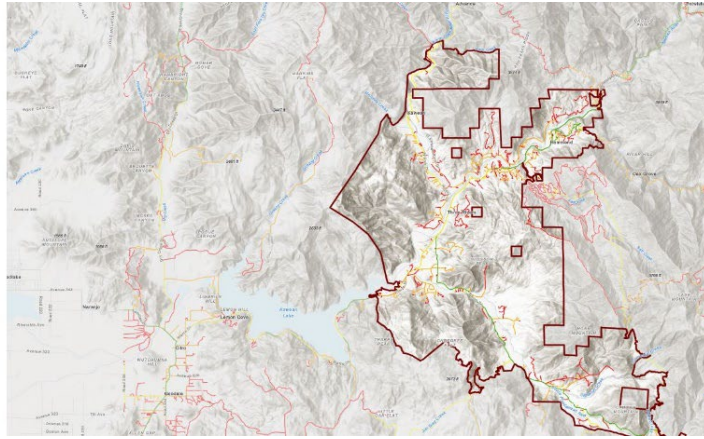


Figure 7 Map of the Three Rivers Area.

Lake Kaweah Rat Trail – The Kaweah Rat Trail was implemented and consists of a six-mile fuel break around Lake Kaweah on the Highway 198 corridor. This project was completed by Tulare Unit hand crews, with the purpose of any accidental start off the highway to be confined to the fuel break and slow down any potential expansion that would lead to a large-scale wildfire.



Figure 8 CAL FIRE hand crew cutting a fuel break in the Three Rivers area.



Figure 9 CAL FIRE hand crew constructing a fuel break.

Gill Range Improvement Burn- In 2023 CAL FIRE conducted the third phase of performing a VMP burn located on the Gill Ranch. This coordinated burn supported eliminating dead and down fuels and the invasive Star Thistle that was present.



Figure 10 CAL FIRE personnel conducting a broadcast burn.



Figure 11 CAL FIRE personnel conducting a broadcast burn.

Concerns:

Fuel loads along escape routes: There are areas in the Three Rivers community where escape in a catastrophic fire emergency could be compromised due to fuel load along the road easement. It needs to be a priority for CAL FIRE and the cooperating agencies/groups to commence fuels projects starting with the major arteries and continuing with primary subdivision routes.

Tree Mortality: The Three Rivers community is at a heightened risk of catastrophic fires due to recent increased tree mortality rates. As indicated on the FRAP Tree Mortality Viewer, most higher elevations in the Battalion range from 20+ to 40+ dead trees per acre. Tree mortality on Case Mountain and in the Grouse, area is evident by plain sight and show well over 75% mortality rate in conifers.

Battalion Priorities:

The priority for the Kaweah Battalion will be to integrate fuel reduction efforts into broader land management and conservation strategies to promote the long-term health and resilience of ecosystems while reducing wildfire risks within the community of Three Rivers and outlying areas of the battalion.

The following projects in the Battalion have been identified. Some are in the process of nearing completion, while other proposed projects are still waiting for final approval.

Priority #1

Project Name: North Fork Drive Fuels Reduction. (In Progress)

Description: Fuels reduction along North Fork Drive. The purpose of the project will be to open the primary escape routes for the community and tourists in the area.

Community: Three Rivers

Project Collaborators: CAL FIRE, Three Rivers Fire Safe Council,

Priority #2

Project Name: Cherokee Oaks Fuel Reduction Phase #1

Description: Fuel reduction / modification goat grazing

Community: Three Rivers – Cherokee Oaks/ South Fork Drive

Project Collaborators: Three Rivers Fire Safe Council, CAL FIRE

Priority #3

Project Name: Kaweah Fuels Reduction

Description: Fuel reduction modification/ evacuation corridor widening from Lemon Hill to Pierce Drive

Community: Three Rivers

Project Collaborators: CAL FIRE, Tulare County RCD

Priority #4

Project Name: Grouse VTP (In Progress)

Description: Fuel reduction/modification and chipping for 1 mile along Grouse Rd. in-between South Fork Drive and the fire control road gate.

Community: Three Rivers – South Fork Drive

Project Collaborators: CAL FIRE, Grouse Rd residents, Three Rivers Fire Safe Council

Priority #5

Project Name: Mineral King Road Fuels Reduction (In Progress)

Description: Fuels reduction along Mineral King Rd from the Oak Grove Dr. intersection to the Oak Grove bridge. Our goal is to open up the escape route for tourists and residents up the one-way in/out Mineral King Road.

Community: Three Rivers, Silver City, Mineral King

Project Collaborators: CAL FIRE, Three Rivers Fire Safe Council, Tulare County Roads.

Priority #6

Project Name: Gill Range Improvement (**3rd Phase**)

Description: Broadcast burn in the ranch perimeter to reduce dead/downed fuels and help eliminate star thistle.

Community: Exeter

Project Collaborators: CAL FIRE, Gill family cattle ranchers.

Priority #7

Project Name: Fire Control Road Maintenance (**In Progress**)

Description: Maintain the fire control roads in the Battalion for fire suppression and quick access to fires.

Community: Badger, Kaweah, Three Rivers, Lemon Cove.

Project Collaborators: CAL FIRE, Tulare County landowners in the SRA, Sequoia Fire Safe Council.

Priority #8

Project Name: KOP (NOE)

Description: Broadcast burn within the Kaweah Oaks Preserve to eliminate dead/downed fuels and help restore the landscape to natural state. Reduce fuel load.

Community: Exeter Project Collaborators: CAL FIRE, Sequoia Riverland's Trust.

Priority #9

Project Name: Rocky Hill Roadside Burn

Description: Roadside burn of the County Right of Way along Rocky Hill, Meyer Drive and Yohkol Valley Road.

Community: Exeter

Project Collaborators: CAL FIRE, TCFD

TULE BATTALION – 4113

Fuels:

The fuels present within the Tule Battalion represent the typical composition found in Central California's San Joaquin Valley and the Sierra Nevada region. This area experiences a Mediterranean climate characterized by warm, dry summers and cool, moist winters. The interplay of climate, topography, geology, and land use dictates the distribution of vegetation within this area.

In the Tule Battalion, vegetation varies from annual grasses and forbs on the valley floor to ancient Sequoia redwood/mixed conifer forests at higher elevations. The valley floor exhibits annual grasses like wild oats, with fuel load varying yearly based on rainfall patterns. As elevation rises from 500 to 1000 feet, the landscape transitions to an Oak Woodland fuel type, where brush becomes more prominent. This brush component includes species such as manzanita, chemise, ceanothus, Scrub Oak, Live Oak, and Poison-Oak. Black Oak and Live Oak, along with Buckeye trees and sycamores in drainages, are interspersed throughout, with higher concentrations on north and east-facing slopes.

This Oak Woodland vegetation type continues up to approximately 3000 feet, where it gradually shifts into the Conifer Belt. Here, scattered oaks, brush, and coniferous trees blend together. At around 4000 feet, conifers become the dominant fuel source, including cedar, pine, fir, Live Oak, and Black Oak, with a mixed brush understory consisting of bear clover, lotus, chinquapin, and Whitethorn Ceanothus. This pattern persists until approximately 5500 feet, where it transitions into a timber fuel type dominated by fir, pine, and sequoia trees. This type typically exhibits areas with heavy downed and dead fuels.

Topography:

The Tule Battalion exemplifies the typical characteristics of many river drainages within the Southern Sierra Nevada Range. It spans a significant portion of the Tule River drainage and extends into the Deer Creek drainage along its southern edge. Terrain varies from gradual, rolling foothills as it graduates from the valley floor at 500 feet elevation to towering granite monoliths at 8000 feet elevation. The Tule River drainage comprises three primary forks—the North, Middle, and South Forks—and is supplemented by numerous feeder creeks and seasonal streams. The landscape is marked by major ridges, mountains interspersed with small ravines, rugged canyons, and occasional gentle valleys. Evidence of glacial activity from millennia past is evident in the form of large granite boulders, rocky escarpments, and sheer rock faces that adorn most ridges and mountains.

Weather:

The Tule Battalion, much like Tulare County, experiences the influence of a Mediterranean climate characterized by cool, moist winters and warm, dry summers. On average, temperatures range from the 50s to the 70s throughout the year. However, it's not unusual to see temperatures drop into the low 20s during winter or soar above 100 degrees Fahrenheit for extended periods in the summer.

The rainy season typically spans from October to April, with an average annual rainfall of 11.03 inches. Summers can be intense, with scorching temperatures and low humidity persisting for weeks. During the North American Monsoonal season, thunderstorms frequently occur over higher elevations, occasionally extending across the Sierra Foothills and valley floor. Some years witness a southwest-driven Monsoonal push, resulting in thunderstorms, lightning, and scattered precipitation in the valley floor and foothill regions.

Fire History:

The Tule Battalion encompasses the Highway 190 corridor, granting access to various recreation spots such as Lake Success, Balch Park, Mountain Home Demonstration State Forest, Sequoia National Forest, Tule Indian Reservation, and Giant Sequoia National Monument. Traditionally, this area sees the highest fire activity within the Tulare Unit. While some fires are sparked by recreational activities, the majority stem from arson. Most arson-caused fires ignite in the lower grasslands, with historical large fires predominantly occurring in grass and oak woodland areas. Notable fires include the "Coffee," "Deep," "Tule," and "Pier" fires originating in the Middle Fork of the Tule River, threatening SRA lands and Mountain Home Demonstration State Forest.

In 2020, the Castle Fire SQF Complex scorched over 12,000 acres in the SRA, with a significant portion affecting the Tule Battalion. Additionally, in 2021, the Windy incident engulfed several thousand acres in the southeastern part of the Tule Battalion.

Tule Battalion Accomplishments:

The Tule Battalion actively pursued multiple fuel projects throughout 2023. Within the battalion, strategically positioned fire suppression tanks play a crucial role. These tanks enable fire engines to swiftly replenish water closer to the incident, resulting in valuable time saved. Specifically, the Cow Mountain Fire Control Road (FCR), Upper Balch Park Road, and Rancheria FCR are focal points for these efforts. CAL FIRE successfully obtained funding through grants to sustain the maintenance of these tanks. Annual inspections ensure that all tanks are operational.

Within the Battalion, numerous fuel breaks exist, including the Rancheria, Happy Camp and River Ridge. While these breaks have demonstrated effectiveness in halting wildfires' advance, neglect can lead to their overgrowth with flammable vegetation. Fortunately, funding has been allocated for maintaining several of these breaks, and planning is underway to restore them to their original condition.



Figure 12 Mountain Home Conservation Camp Crew working on a project in the Tule Battalion



Figure 13 CAL FIRE personnel educating property owners on proper clearance and fire safety inspections.

Fire Defense Projects:

Currently, the Battalion is supervising numerous substantial projects at different stages, with many already receiving approval. These include initiatives such as the Balch / Blue Ridge Fuel Break, Happy Camp Fuel Break, Merritt VMP, River Ridge, Ward Canyon Fuel Reduction, Blue Oak Ranch and Camp Nelson VTPs. These projects entail coordination with diverse landowners, ranging from owners of small parcels to those holding over 200,000 acres. The combined area slated for treatment across these projects amounts to roughly 20,000 acres, employing a variety of treatment methods.

The Tule Battalion has successfully conducted Right of Way (ROW) fuel mitigation (burning) along both sides of Plano/Rd 256 from Reid Ave to Ave 196 in the surrounding communities of Porterville and Strathmore. This effort has resulted in a notable reduction of unwanted ignitions by 75%-85% over the past year. The next phase of the plan involves expanding operations to the Frazier Valley and Yokohl Valley areas, with a target timeline for implementation by early summer of 2024.

Furthermore, ongoing burning efforts along the shoreline of Lake Success have demonstrated tangible benefits to recreational users and visitors utilizing the camping facilities within the lake boundaries. This initiative will remain a priority project slated for early summer 2024.

Battalion Priorities:

The following proposed projects in the Battalion have been identified. Several are in the process of nearing completion, while other proposed projects are still waiting for final approval.

Priority #1

Project Name: Merritt VMP
Description: VMP Fuels Reduction 10,000 acres
Community: Springville
Project Collaborators: Merritt Farms, CAL FIRE

Priority #2

Project Name: Lewis Hill ROW
Description: Maintain the Right of Way (ROW) along both sides of Plano St/Rd256.
Community: Porterville/Strathmore MTZ
Project Collaborators: CAL FIRE, Tulare County Fire Department, Porterville Fire Department, CHP, Tulare County Roads.

Priority #3

Project Name: Fraiser Valley Roadside Burn

Description: Roadside burn along Fraiser Valley Road from the SRA boundary to Holdridge Drive.

Community: Strathmore, Springville

Project Collaborators: CAL FIRE, TCFD

Priority #4

Project Name: Rancheria / Cow Mountain Fuel Break maintenance

Description: Fuels Reduction

Community: Springville

Project Collaborators: CAL FIRE, USFS SQF, Tulare County landowners in the SRA, Tulare County Resource Conservation District, Sequoia Fire Safe Council, and other local stakeholders.

Priority #5

Project Name: Ward Canyon

Description: Fuels Reduction

Community: Springville

Project Collaborators: CAL FIRE, Tulare County Resource Conservation District, Tulare County landowners in the SRA, Sequoia Fire Safe Council.

Priority #6

Project Name: River Ridge

Description: VTP Fuels Reduction

Community: Springville

Project Collaborators: CAL FIRE, Tulare County Resource Conservation District, Tulare County landowners in the SRA, Sequoia Fire Safe Council, and other local stakeholders.

Priority #7

Project Name: Blue Oak Ranch

Description: Fuels Reduction

Community: Springville CA

Project Collaborators: CAL FIRE, Tulare County Resource Conservation District, Sequoia Fire Safe Council.

Priority #8

Project Name: Pierpoint Fuel Break

Description: Fuel reduction done with hand crews

Community: Pierpoint Springs, Camp Nelson

Project Collaborators: CAL FIRE, Tulare County Fire, Tulare County landowners in the SRA, Sequoia Fire Safe Council. United States Forest Service

Priority #9

Project Name: Sequoia Crest Fuel Break

Description: Fuels Reduction and creation of fuel break in tree mortality areas

Community: Sequoia Crest

Project Collaborators: CAL FIRE, USFS SQF, Tulare County Fire, Tulare County Resource Conservation District, Tulare County landowners in the SRA, Sequoia Fire Safe Council, and other local stakeholders

Priority #10

Project Name: Fire Control Road/Cistern maintenance/New signage

Description: Maintain the fire control roads in the battalion for fire suppression and quick access to fires.

Community: Balch Ranch, Springville, Triple R Estates, Mountain Home State Forest, Ponderosa, Camp Nelson, Happy Camp, Tule Indian Reservation.

Project Collaborators: CAL FIRE, Tulare County landowners in the SRA, Tulare County Resource Conservation District and Sequoia Fire Safe Council.

FOUNTAIN SPRINGS BATTALION – 4114

Fuels:

The fuels within the Fountain Springs Battalion are typical of those found in the Central California foothills, San Joaquin Valley and Sierra Nevada. This area is influenced by a Mediterranean climate with warm, dry summers and cool moist winters. The climate, topography, geology and land use patterns within this region determine the vegetation patterns. Vegetation within the Fountain Springs Battalion varies from annual grasses and forbs on the valley floor to mixed conifer forest at the higher elevations. The lower elevations manifest annual grasses, including wild oats and loading varies from year to year based on seasonal rainfall. Between 500'-1000' elevation this changes to a Woodland Oak fuel type with brush becoming more prevalent along with pockets of gray/bull pine starting around the 2000' level. The brush component is made up of several species, including, but not limited to manzanita, chemise, ceanothus, Scrub Oak, Live Oak and Poison-Oak. The brush is interspersed with Blue Oak and Live Oak, Buckeye trees and Sycamore (in drainages) with higher densities on the north and east aspects. This vegetation type continues to about 3500' where it blends into the conifer Belt with scattered oaks, brush and conifer trees. At about 4500, conifers become the more dominant fuel with such species as; cedar, pine, fir, live oak and black oak with a mixed brush understory which includes Bear Clover, Lotus, Chinquapin and Whitethorn Ceanothus.

Topography:

The Fountain Springs Battalion is typical of most of the foothill areas in the Southern Sierra Nevada Range and encompasses a large portion of the Deer Creek drainage, White River drainage and the upper portions of the Poso Creek drainage on its southeastern border. The topography ranges from gentle rolling foothills above the valley floor at 400' elevation to steep river drainages. Major ridges and mountains are separated by small ravines, deep rugged canyons, and a few gentle valleys with elevations within the State Responsibility Area topping out near the 5000' elevation range.

Weather:

Typical summer weather patterns consist of 90 – 105-degree days with humidity in the upper teens to low 20's and nights in the upper 50's to near 70 degrees with humidity in the high 30's to low 50's. Winds are generally light and diurnal, up slope, up canyon in the daytime and down slope, down canyon at night.

Fire History:

The Fountain Springs Battalion averages approximately 7-10 fire starts annually. The majority of those fires started were undetermined. Each year however you can expect a least a couple of starts in the upper elevations within the Battalion where there is significant potential for a large extended attack fire. Large extended attack fires have occurred in the Battalion over the years with several fires in the 500 – 1500-acre range, there is no known history of major fires in the Battalion.

2023 Fountain Springs Battalion Accomplishments

Posey VMP- The Fountain Springs Battalion had several accomplishments in 2023. The 340-acre Posey Vegetation Management Project around the communities of Posey, Panorama Heights and Balance Rock was identified as the most important project needing attention due to the extremely WUI environment. This project is still ongoing with a completion date of 2033.



Figure 14 Crew clearing brush from roadway.

Rock Plant Roadside Burn- In 2023 CAL FIRE conducted a VMP burn consisting of six-miles of right away along Deer Creek Rd. and Rd. 296. This coordinated burn supported the prevention of unwanted fires in the area and to reduce the fuel loading.

Fire Road Maintenance- Other accomplishments include fire road maintenance needing attention, Station personnel have driven all fire control roads noting their condition, removing flammable brush where needed, and performed routine maintenance on culverts.



Figure 15 Defensible Space Inspectors educating a landowner about defensible space.



Figure 16 Example of a shaded fuel break.

Battalion personnel continue to be proactive with residential clearance inspections (PRC 4291) which requires the 100-foot clearance around all structures within the SRA. We have placed Fire Prevention Signs throughout the Battalion in high traffic areas reminding the public to prepare for fire season by clearing flammable vegetation from their property.

CONCERNS:

TREE MORTALITY

The communities of Posey, California Hot Springs, and Pine Flat are at a heightened risk of catastrophic fires due to recent increased tree mortality rates.



Figure 17 Crew assisting with “Chipper Days” in the Hot Springs area.

Areas of concern:

1. There are two small communities within the battalion, Pine Flat/Hot Springs and Panorama/Posey.
2. The lower elevations within the battalion, consists mostly of large tracks of ranch land with very few residences.

Battalion Priorities:

Continuing to implement various types of vegetation reduction and management will be the priority within the battalion but also serve as crucial fuel breaks while helping to mitigate the spread of wildfires. This not only protects the battalion's assets but also contributes to broader fire management efforts, safeguarding neighboring communities.

Key priorities for the battalion include:

****Regular Maintenance**:** Implementing a schedule for regular inspection and maintenance of fire roads to ensure they remain accessible and clear of debris or obstructions. This includes clearing vegetation along the roadsides to maintain them as effective fuel breaks.

****Road Upgrades**:** Identifying areas where road improvements are needed, such as grading, drainage enhancements, or surface repairs, to optimize accessibility and functionality, particularly during adverse weather conditions or emergencies.

****Strategic Planning**:** Developing a strategic plan for prioritizing road maintenance and upgrades based on factors such as fire risk assessments, proximity to communities, and historical fire patterns. This ensures resources are allocated efficiently to areas most in need.

****Collaboration**:** Collaborating with relevant agencies, including local authorities, landowners, and fire management agencies, to coordinate efforts in maintaining and updating the fire road network. This may involve sharing resources, expertise, and funding to achieve common goals.

****Community Engagement**:** Engaging with local communities within the battalion to raise awareness of the importance of fire road maintenance and seek their support in ensuring access to these areas in times of need. Community involvement can also help identify additional resources or volunteer efforts to supplement maintenance activities.

Priority #1

Project Name: Pierpoint Fuel Break

Description: Fuel break around the community of Pierpoint.

Community: Pierpoint Springs, Camp Nelson

Project Collaborators: CAL FIRE, Tulare County Fire, Tulare County landowners in the SRA, Sequoia Fire Safe Council, United States Forest Service

Priority #2

Project Name: Rock Plant Roadside Burn

Description: Broadcast burn within the county roads right of way along six miles of county roads to reduce unwanted fires and to reduce fuel loading.

Community: Porterville, Tule Indian Reservation

Project Collaborators: CALFIRE, Tulare County Road Dept, Private Landowners in the SRA.

Priority #3

Project Name: Posey VMP

Description: Approximately 340 acers. Fuel reduction around the communities of Posey, Panorama Heights, and Balance Rock.

Community: Posey, Panorama Heights, Balance Rock

Project Collaborators: CAL FIRE, private landowners in the SRA, US Forest Service.

Priority #4

Project Name: Panorama Heights Fuel Reduction Project

Description: Fuel reduction around the community of Panorama Heights

Community: Panorama Heights & Poso Park

Project Collaborators: CAL FIRE, Tulare County landowners in the SRA, Sequoia Fire Safe Council and the US Forest Service.

Priority #5

Project Name: Grapevine Road

Description: Fuel reduction, road maintenance for fire suppression for quick access to fires.

Community: Fountain Springs, Posey, California Hot Springs, Pine Flat.

Project Collaborators: CAL FIRE, local landowners, Tulare County Road Dept.

Priority #6

Project Name: Old Control Road

Description: Fuel reduction, road maintenance for fire suppression for quick access to fires.

Community: Fountain Springs, Posey, California Hot Springs, Pine Flat.

Project Collaborators: CAL FIRE, local landowners, Tulare County Road Dept.

Priority #7

Project Name: Fire Control Road maintenance

Description: Maintain the fire control roads in the battalion for fire suppression and quick access to fires.

Community: Fountain Springs, California Hot Springs, Poso, Poso Park, Jack Ranch, Sugarloaf Village

Project Collaborators: CAL FIRE, Private Landowners in the SRA, Sequoia Fire Safe Council.

Priority #8

Project Name: Battalion Fire Prevention Signs

Description: Public education, Fire Prevention Messages displayed on roadside signs.

AIR ATTACK PROGRAM: Porterville Air Attack Base



The Porterville Air Attack Base was established in 1958, originally as a US Forest Service Base. In 1966 CAL FIRE and the Forest Service signed a cooperative agreement. In the mid 70's Bureau of Land Management joined the agreement and have augmented staffing when needed. Originally built as a three-pad base, in 2003 a new base was built and placed in service. This base now consists of an Operations Building, Warehouse, Hanger, Retardant Mix Plant and five loading pads.

Porterville Air Attack Base is a joint operation facility operated by both Cal Fire and USFS staff. The Cal Fire staff consist of 1 Battalion Chief, 3 Fire Captains, 1 Fire Apparatus Engineer, and 7 Firefighter 1's. An additional 3 Fire Apparatus Engineers will be assigned to manage the EU Helicopters for an estimated 90 – 120 days. The Battalion Chief and both Captains are ATGS qualified, and the Fire Apparatus Engineer operates as the ATBM. The USFS staffing consist of 1 Battalion Chief, 1 Fire Captain, 2 Air Base Technicians, 2 Perm/Seasonals, and 4 Temporary employees.

Equipment based out of Porterville consist of one OV-10 Bronco, which is used as an aerial supervision platform, and two S-2T air tankers. Often one or more Federal Air Tankers will be assigned to the base. Additionally, Redding Smokejumpers will use Porterville Air Base as a satellite facility to position aircraft and jumpers during fire season as well as Cal Fire and Federal Type 1 Helicopters (1 Fed & 1-2 State) that are brought on under EU/CWN contract each season. For the 2024 Fire Season, it is anticipated Porterville Air Attack Base will host 1 of 3 Cal Fire EU Type 1 Helicopter with night operation capabilities.

The Porterville Air Base mix plant utilizes 2 electric pumps capable of flowing 1100 gpm each. The mix plant also keeps in storage 70,000 gallons of fire-retardant ready to be loaded on aircraft. With the new base build in 2003, Porterville also increased its loading capabilities by adding 2 additional loading pads bringing the total to 5. On average Porterville Air Attack Base supplies over 1,000,000 gallons of fire retardant to incidents each year.

The Porterville Air Attack Base and its aircraft support emergency operations in 6 counties which include: Tulare, Kern, Fresno, Inyo, Los Angeles, and Ventura as well as 5 US Forest: Sequoia, Sierra, Los Padres, Angeles, and Inyo. The base will also support operations for incidents on BLM land falling within the Central California District and BIA land consisting of the Tule Indian Reservation.

Future plans for the Porterville Air Attack Base consist of the possible construction of a 100' x 100' fully lit helipad designed to accommodate a type 1 helicopter. Normal operations locate the type 1 helicopters across the runway on the other side of the airport. The construction of the new pad will be located near the hangar and allow the type 1 helicopter that is on contract to have a closer parking location and increase response time and safety for the crew. When pad is not in use, it may also offer a landing area for medivac helicopters in case of emergencies. Additional plan for the Porterville Air Attack Base will be an upgrade to the emergency back-up generator.

TULARE FIRE CENTER: Firefighter Hand Crew Program

The Tulare Fire Center is located at the Porterville Developmental Center off Highway 190 in the Southern Region of Tulare County. The Tulare Fire Center was established in the Summer of 2020 due to a shortage of inmate fire crews. The Tulare Fire Center originally started with the hiring of 2 crews of 12 firefighters with 3 captains and has now grown into 7 permanently funded crews, 10 Captains and 9 Engineers. The Tulare Work Center is also staffed with 3 Limited Term Captains and 3 Limited Term Engineers. To assist in the support of this program we now have 1 Division Chief, 2 Battalion Chiefs, 1 Staff Service Analyst, 1 Forestry Logistics officer, Heavy Equipment Mechanic, a Stationary Engineer, and State cooks.

Facilities

The Tulare Fire Center currently has an MOU established with Porterville Developmental Center that provides us access to 5 buildings for which each accommodates the needs of each fire crew including a full kitchen, offices, and sleeping quarters for all firefighters and supervisors of each crew. Additionally, there are two outside gyms setup for physical training. In addition to these buildings, 2 annexes (modular buildings) were provided in the MOU for offices and supplies. The Tulare Fire Center has access to a centralized training room that is used for our new hire and rehire academies to prepare for the upcoming season at what is known as Camp Vandalia which is also a part of the Porterville Developmental Center. Similarly, we have access to an outdoor Track and Field facility which is utilized for purposes of physical training.

Daily Operations & Projects

The firefighter hand crews serve multiple purposes. When the firefighters are not out actively fighting fires, they are working on Fuels Reduction Projects and Vegetation Management Projects within the local unit to help in the prevention of catastrophic fires and to provide access and ease in preparation for quicker fire suppression. For example, we are currently clearing brush, chipping and making burn piles in preparation of future control burns in the following locations: Posey VMP, Merritt VMP, Crawford Corral VMP, Kaweah Rat Trail, PDC Training Burn, Success Training Burn, and Mountain Home fuels Reduction project just to name a few. These projects are scheduled every day, especially when fire danger is low. In addition to assisting with the Fuels reduction projects we also help the unit maintain its fire roads and help Mountain Home Demonstration State Forest clean its campsites and maintain its hiking trails.

MOUNTAIN HOME CONSERVATION CAMP

EASTERN OPERATIONS

Program Information

Mountain Home Conservation Camp is in the Sequoia National Forest, northeast of Springville and slightly west of Mountain Home Demonstration State Forest. Mountain Home Camp can house up to 125 Inmates and staff up to 5 Type 1 hand crews. Due to the early release of Inmates that staff CAL FIRE fire crews throughout the state of California, Mountain Home Camp is at a drawdown to just two Type 1 hand crews. Along with fighting wildland fires, crews assisted with numerous grant funded pre-fire fuels projects last year. These projects include the fuels modification project around Shake Camp campground located on Mountain Home Demonstration State Forest (MHDSF), Sequoia Crest fuel break, Mountain Home Demonstration State



Forest fuels reduction project as well as helping with the Tulare unit VMP and VTP's. Crews from Mountain Home Camp also provide much needed public service work throughout Tulare County, including working with cooperators such as the Tulare County RCD, County Road Department, Army Corps of Engineers, Tulare County Office of Education, irrigation, and flood control districts as well as the cities of Porterville, Lindsey, and Woodlake.

Mountain Home Crews also assist maintaining trail systems within the Mountain Home Demonstration State

Forest and facilitate and carry out the needs of hazard fuel reduction and vegetation management projects within the state forest. Mountain Home crews also performed work and maintenance on several miles of Fire Control Roads throughout the unit. Mountain Home Camp also produces fire prevention signs which are intended to increase fire safety awareness to the public. Mountain Home Camp can also produce thousands of board feet of milled lumber, hand crafted signs and various furniture items to nonprofit organizations, local government, and state agencies. During 2023 crews from Mountain Home Camp Logged over 4700 incident based hours. Over half of those hours were helping with the spring time flooding throughout Tulare County. Crews filled sand bags, laid muscle wall and built miles of dikes to help divert flood waters. Mountain Home Camp is committed to providing a quality work force regardless of the nature of the assignment, from emergencies to fuels reduction work to community service projects.



MOUNTAIN HOME DEMONSTRATION STATE FOREST

Mountain Home Demonstration State Forest (MHDSF) Fuel Reduction and Restoration Activities



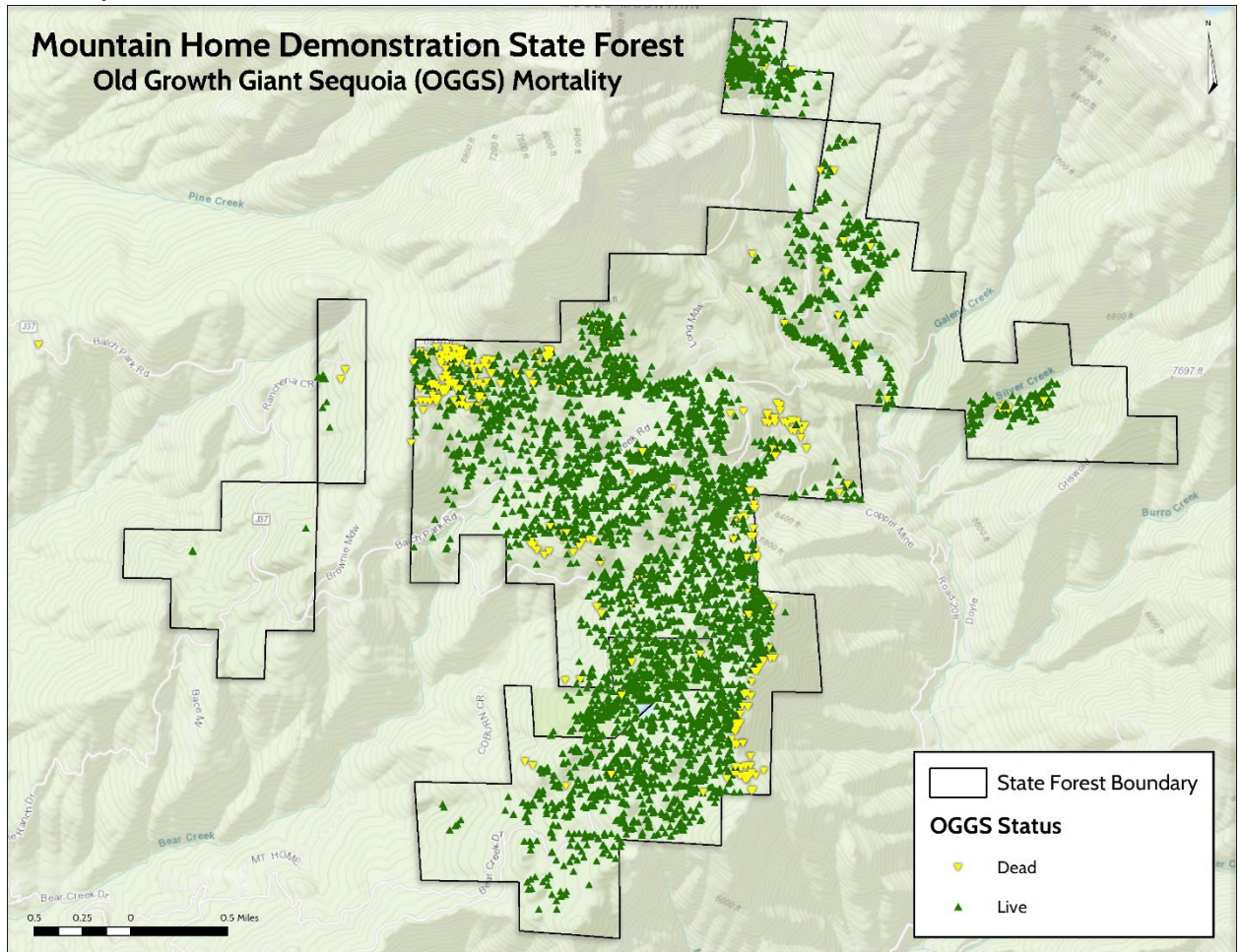
Fuel reduction and forest restoration activities at MHDSF during the summer and fall of 2023 primarily focused on salvage harvest of trees killed or substantially damaged during the 2020 SQF Complex. Sierra Forest Products sawmill held MHDSF to a strict daily production rate of 3-4 log truck loads or roughly 18-24 thousand board feet (MBF). The mill at Terra Bella was purchased during the summer of 2023. Following the first precipitation event in October they requested as many logs be delivered prior to shutdown as each Licensed Timber Operator (LTO) could produce. However, due to financial difficulties, they quickly changed their minds and shut down all forest operations shortly thereafter. The year-end total of delivered logs yielded a

volume of a little over 2 million board feet (MBF) for 2023.

Assuming 2024 log deliveries will be like 2023, an expected 2.5-3 MMBF is anticipated from salvage operations assuming the timber has not degraded to less than merchantable value. The County Road system leading to Mountain Home that suffered significant damage during the winter rain on snow events in 2022, were partially repaired by Tulare County Road Department and their various contractors. It is anticipated that the public roads leading to MHDSF will be a higher priority due to public pressure for recreational access and will likely be brought to a “public” standard late summer.

Forest staff completed two Continuous Forest Inventories. The first was the final re-measurement of the original variable radius plot system. The second was the establishment and initial measurement of a new fixed radius plot system that utilizes a similar grid as the old system. The fixed radius system is better for permanent plots as it better accounts for mortality and ingrowth and does not require additional measurement of the old-growth giant sequoia (OGGS) trees that have already been inventoried. Unfortunately, during the early season cruising activity, several OGGS that appeared healthy during the 2022 OGGS inventory, were observed to be chlorotic and sparse. Further investigation later in the field season found that most of the poor looking OGGS had died. This prompted a field tour with CALFIRE entomologists and pathologists; as well as local cooperators and land managers that occurred in November. Many of these trees are located in areas of low to moderately severe fire areas.

The map below shows the mortality from the SQF Complex as determined by the 2022 OGGS inventory.



The small plantations (typically under 2.5 acres in size) reported in the 2023 Fire Plan are almost entirely dead and the majority have fallen to the ground. The mortality, in large part, was initiated by prolonged drought stress and subsequent attack by bark beetles. Those trees that didn't die from beetles were killed by fire. These dead trees need to be mechanically piled and burned to prepare the site for planting. Pile and broadcast burning shall be performed by MHDSF staff and/or MHCC crews on permissive burn days with a permit through the San Joaquin Valley APCD. Given the dynamic nature of vegetation response to disturbance, sprouting and natural seeding will eventually re-invade the treated areas. These areas must be maintained by chemical and/or manual means which may and should include the use of prescribed fire.

Maintain a defensible fuel profile within and around day use areas and campgrounds. Saplings and small poles shall be marked by MHDSF staff for cutting and chipping/burning. This work will take place within the common campground and day use facilities and shall extend for a distance of at least 100' in all directions from the campground improvements. The treatment distance will be increased as slope increases or as directed by the Forest Manager. Much of this work may be done by LTOs in those areas where fire induced mortality occurred within and adjacent to campsites.

Maintain PRC 4291 clearance specifications around all State owned and operated structures that are maintained for human habitation. This shall include the summer and winter headquarters, barracks, and Pack Station. Similar maintenance shall be performed around the fuel tank, propane tanks, and warehouse as well.



Continue fuel treatments in selected areas throughout the Forest. Strategically located areas that are within close proximity to roads or trails shall be prioritized for treatment. These areas shall be treated by pre-commercial thinning of conifers typically less than 8 inches DBH and full removal of woody brush species. All cut vegetative matter shall be piled for seasonal burning and/or lopped and scattered providing clearance around residual trees for future broadcast burning. All

cutting, piling, lopping, and scattering shall be performed by contractors, MHCC crews, cover crews, and/or MHDSF staff. These treatments shall be done once all post-fire rehabilitation and restoration work has been completed.

Assuming heavy equipment can access the forest, a tractor piling operation may occur on new lands acquired in 2020. The majority of these areas have little timber value and are occupied with an abundance of undesirable vegetation. Any merchantable timber that exists will be harvested and the remaining slash and brush will be piled/windrowed with dozers equipped with brush rakes. The piles will be burned in the fall. No formal broadcast units in green forest stands are planned for 2023.

Recent Harvest Activity

As previously stated, approximately 1.5-2 MMBF of fire killed timber was harvested during the 2023 season.

Additional Fuel Treatments

The Tulare County Resource Conservation District has applied for a Forest Health Grant to be implemented at Mountain Home Demonstration State Forest. Should the project get funded, various treatment methods will be employed to make MHDSF more resilient to wildfire and other stressors. It is reasonable to foresee mastication, tractor piling, hand thinning and piling, and broadcast burning being utilized to carry out the work. Tree planting and herbicide release treatments are also likely.

Planned Timber Harvest Operations

Mountain Home Forest staff continue planning for the harvest and rehabilitation of approximately another 400 acres destroyed during the SQF Complex that remain to be treated.

Planned Fuel Treatments

The only fuel treatments planned under the scope of the 2024 Fire Plan are the treatment and burning of logging slash and other damaged vegetation resulting from the SQF Complex unless otherwise explained above. Forest staff are in the process of writing a forest wide Vegetation Treatment Plan that when finished will serve as the CEQA document for fuels reduction and prescribed fire projects in the future. This VTP will also allow herbicide application to control competing vegetation.

Summary

Current management activities at MHDSF focus on the restoration and protection of a magnificent Southern Sierra mixed conifer forest. This Forest contained 4,750 old growth giant sequoia specimens which John Muir referred to as “the finest the Sierra had to offer”. Given the history of fire suppression activities in the western states, forest managers must keep fuel loading and resource protection as a top priority. In the face of impending climate change, managers must consider the ecological needs of the species contained within the forest and develop strategies to minimize the potential for long-term negative effects. Wildfires that occur on the majority of public lands are getting bigger and burning with more intensity than they have historically. These “mega fires” indiscriminately destroy habitats and watersheds and set succession back centuries. The management activities occurring at MHDSF are designed to reverse the trends of overstocking by creating a forest that more closely resembles the pre-European condition as was found by the pioneers.

It should be noted that all the on-the-ground activities that take place at MHDSF have been thoroughly planned and evaluated and are in compliance with the California Forest Practice Rules, California Environmental Quality Act, California Department of Fish and Wildlife Rules, Air Pollution Control District Rules and Regional Water Quality Control Board Rules and Regulations. If you should have any questions or comments regarding the management of Mountain Home Demonstration State Forest, you can contact the Forest Manager at 559-539-2855.

TRAINING BUREAU

The Tulare Unit Training Bureau has set several goals to improve firefighting effectiveness, training efficiency and safety of its members.

The Goals include but are not limited to:

1. All Unit personnel attend all or applicable segments of the annual Continued Professional Training (CPT) academy(s) to maintain firefighting skills and required recurrence training. The intent is for personnel to meet 4029 and 4064 training requirements.
2. All Unit personnel to meet 4021 Employee Development Guide training specifications for their respective job classification.
3. All TUU Fire Control personnel receive continued training on firefighting tactics and safety in both wildland and structural firefighting. Two examples of such training include Firefighter Survival (structural) and Sand Table scenario training.
4. All TUU Battalion Chiefs, Fire Captains and FAE's attend C-234 Intermediate Firing Operations course.
5. Fire Control Personnel assigned to the Porterville Air Attack Base attend the following training where applicable:
 - a. Air Base Safety Training
 - b. Air Tanker Base Manager (ATBM) Training
 - c. C-378 Aerial Supervision (ATGS) Training
6. All Tulare Unit "Frequent Drivers" comply with department policy regarding Defensive Driver training by successfully completing the Department of General Service-ORIM online Defensive Driver Training at least once every four years.
7. All Firefighters become IFSAC ProBoard Certified

TUU personnel attend applicable training and qualify in Incident Command System (ICS) positions. The intent is to meet the Unit's obligation to Minimum ICS Qualified Personnel Matrix (7700) located in Handbook 7000 - Fire Operations.

APPENDIX A: PRE- FIRE PROGRAM PROJECTS



PRE-FIRE PROJECTS

Tulare Unit (TUU)

01/01/2023 thr 12/31/2023

Tulare Unit (TUU)

PROGRAM	PROJECT NAME	Project Status	Treatment Footprint Acres	Treatment Footprint Miles
Cal VTP	Bear Creek	Planned		
Fire Plan	Blue Ridge FCR Fuel Break	Active		
Fire Plan	Buzzard Roost FCR	Active		11.23
Forest Health	Case Mountain Forest Health Project	Active	2,876.76	
Fire Plan	Clearances	Active		
Fire Plan	Cow Mountain FCR	Active		3.92
VMP	Crawford Corral	Active	1,078.17	
Fire Plan	Davis Spur FCR	Active		0.08
Fire Plan	Doyle Springs Fuel Reduction Project	Complete	103.58	
Fire Plan	Gill Range Improvement NOE	Active	246.82	
Fire Plan	Grouse Hazard Tree Removal	Active	0.04	
Fire Plan	Herbert Burn	Active	585.39	
Fire Plan	Kaweah Oaks Preserve	Active	212.35	
Fire Plan	Kaweah Rat Trail	Active		24.38
Fire Plan	Lewis Hill Burn	Planned		
Fire Plan	Manikin Flat FCR	Active	32.49	8.74
VMP	Merritt VMP	Active	1,080.93	
Fire Plan	Mineral King Hazardous Fuels Reduction Projec	Active	217.12	
Fire Plan	Mountain Home Fuels Reduction	Active	6,069.04	
Fire Plan	Mountain Home Reforestation	Active	797.34	
Fire Plan	PDC	Active	28.42	
Fire Plan	Pine Flat / Panorama	Active		
VMP	Posey VMP	Active	121.67	
Fire Plan	Pot Hole FCR	Active	45.33	37.86
Fire Plan	Rancheria	Active		
Fire Plan	Rancheria Fuel Break	Active	21.82	3.85

Fire Plan	Rock Plant Roadside Burn	Planned		
Forest Health	Sequoia Wildfire Reforestation and Recovery Pr	Active	6,468.63	
Fire Plan	Success Rx Burn	Active	306.01	2.56
Fire Plan	Three Rivers and Kaweah Community Risk Asses	Active		
Fire Plan	Three Rivers Wildfire Preparedness Education a	Active		
Fire Plan	TUU Fuel Reduction Project	Active		
Fire Plan	Ward Canyon Fuel Reduction Project	Active	397.59	
Fire Plan	Yokohl Roadside Burn	Planned		
		Totals	20,857.60	92.62

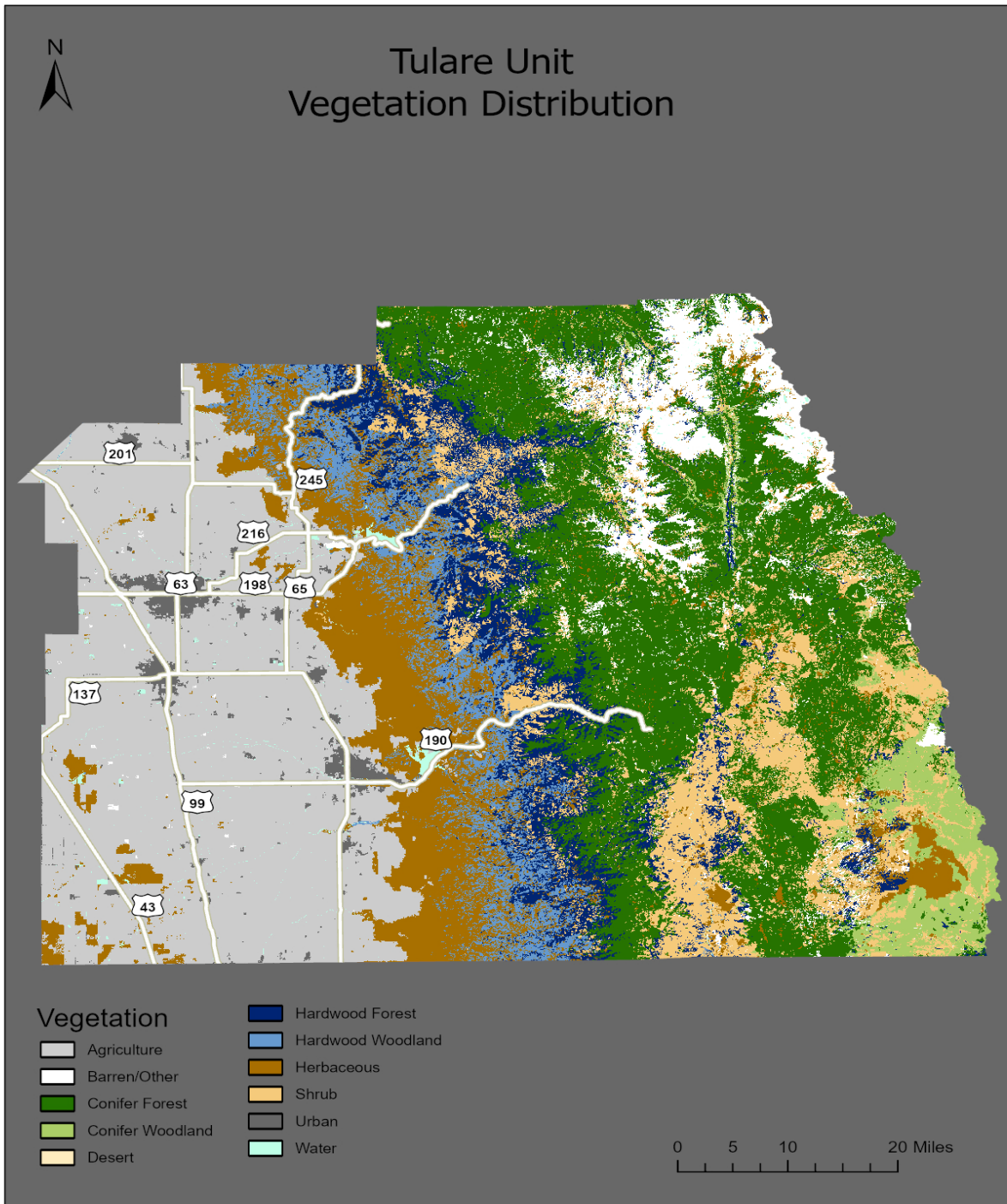


Figure 25 Modelled distribution of fuel across the Tulare Unit

APPENDIX C: LARGEST FIRES PAST 50 YEARS

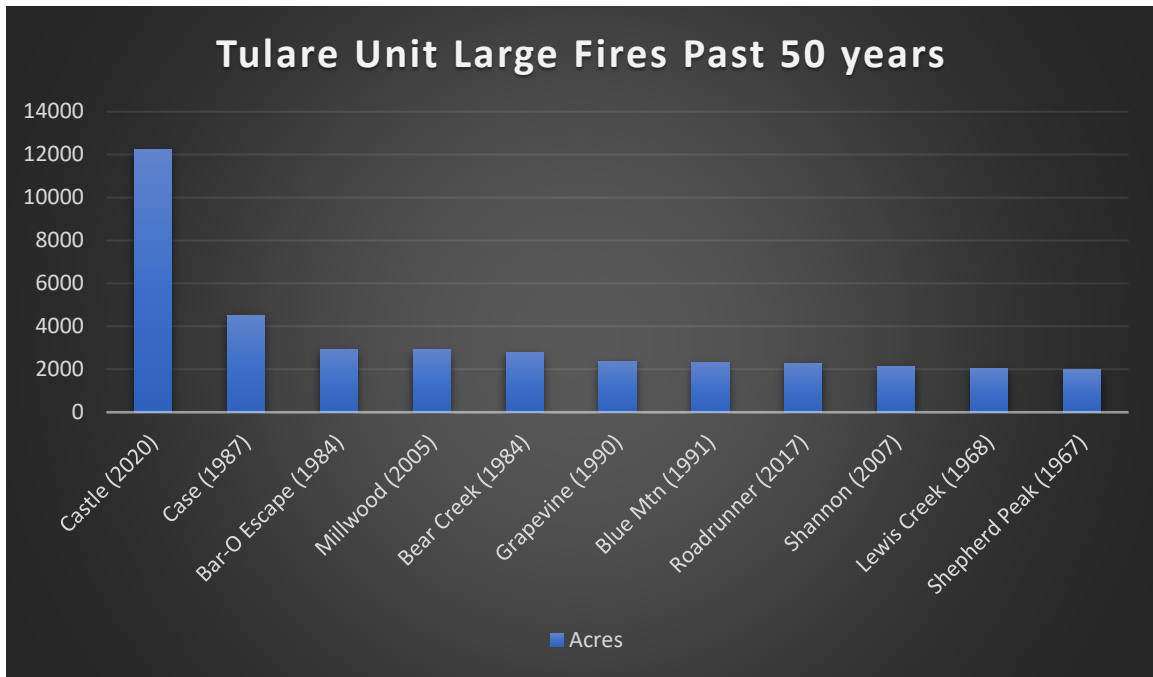


Figure 26 The graph shows the largest fire in the State Responsibility Area in the past 50 years, with the 2020 Castle Fire being the largest at over 12,000 acres.

APPENDIX D: IGNITIONS

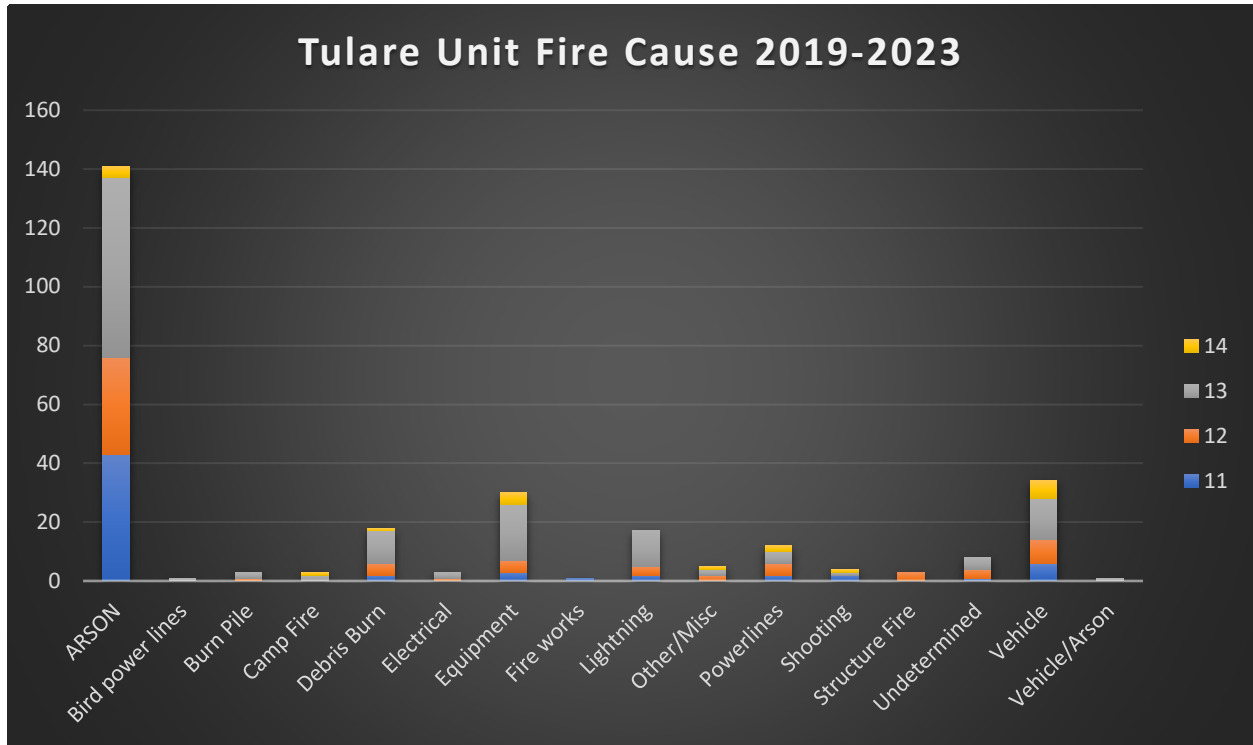


Figure 27 The pie chart shows the distribution of fire causes in the Tulare Unit from 2019 – 2023.

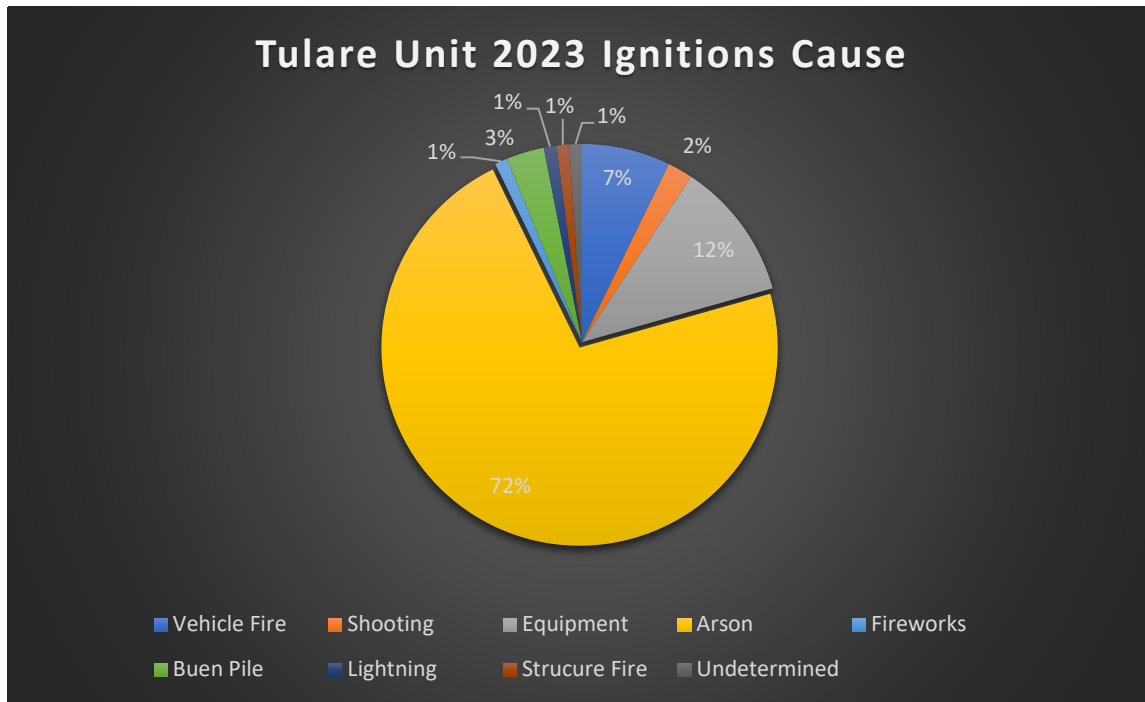


Figure 28 This graph shows the distribution of ignitions causes in the Unit.

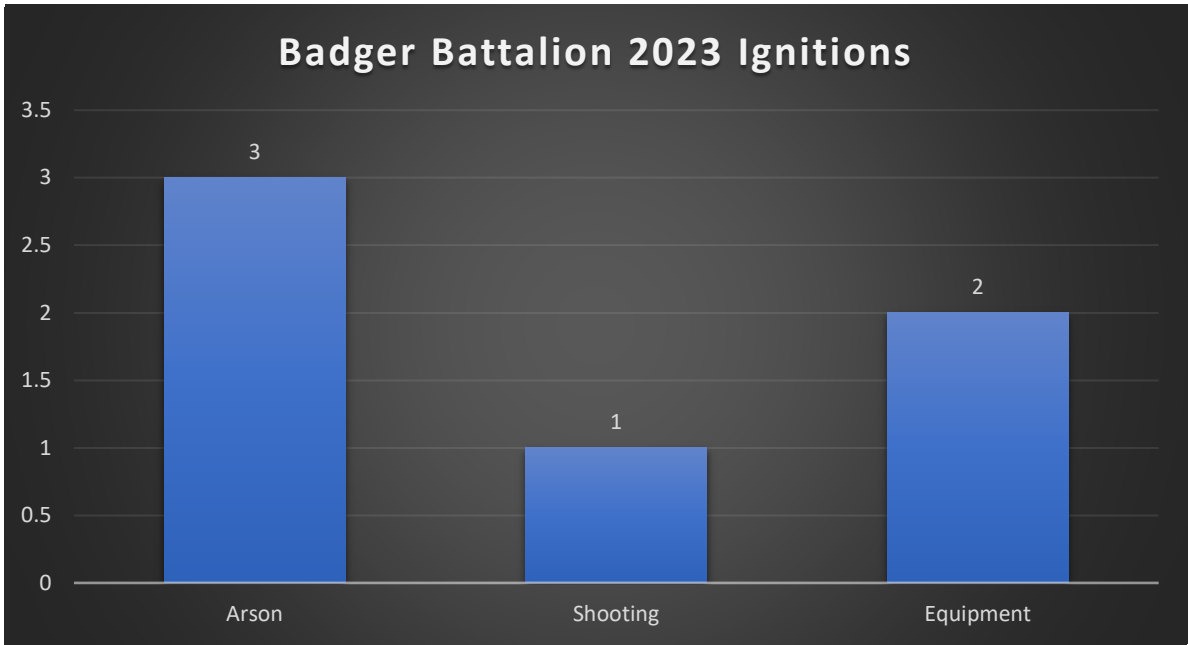


Figure 29 Fire Causes in the Badger Battalion. There were 6 ignitions in the Badger Battalion.

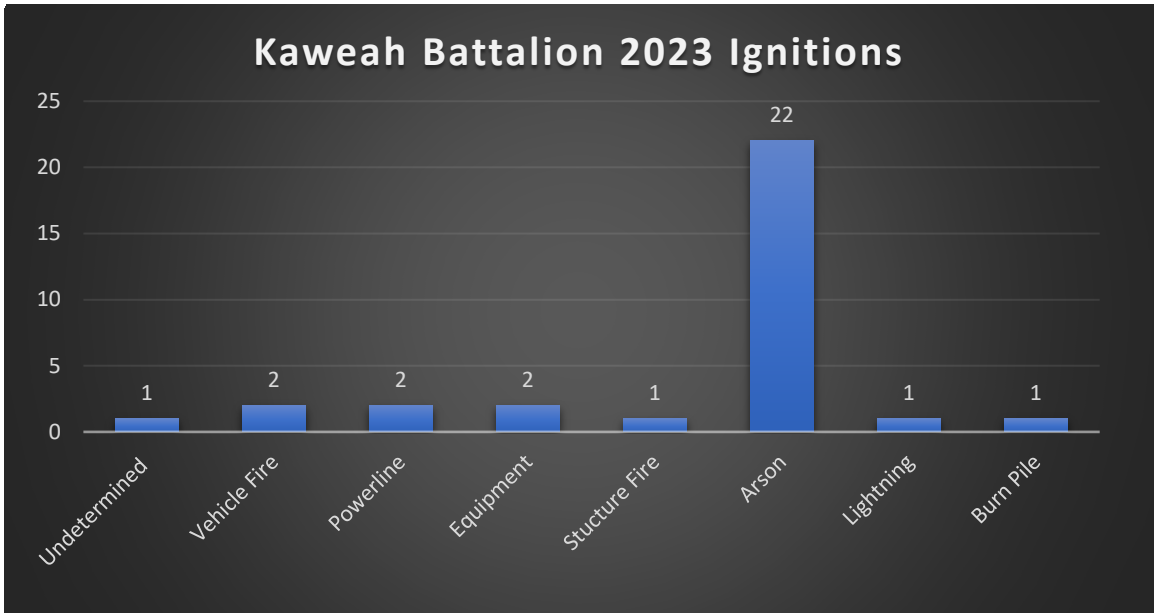


Figure 30 Fire causes in the Kaweah Battalion. There were 32 ignitions in the Kaweah Battalion.



Figure 31 Fire causes in the Tule Battalion. There were 34 ignitions in the Tule Battalion.

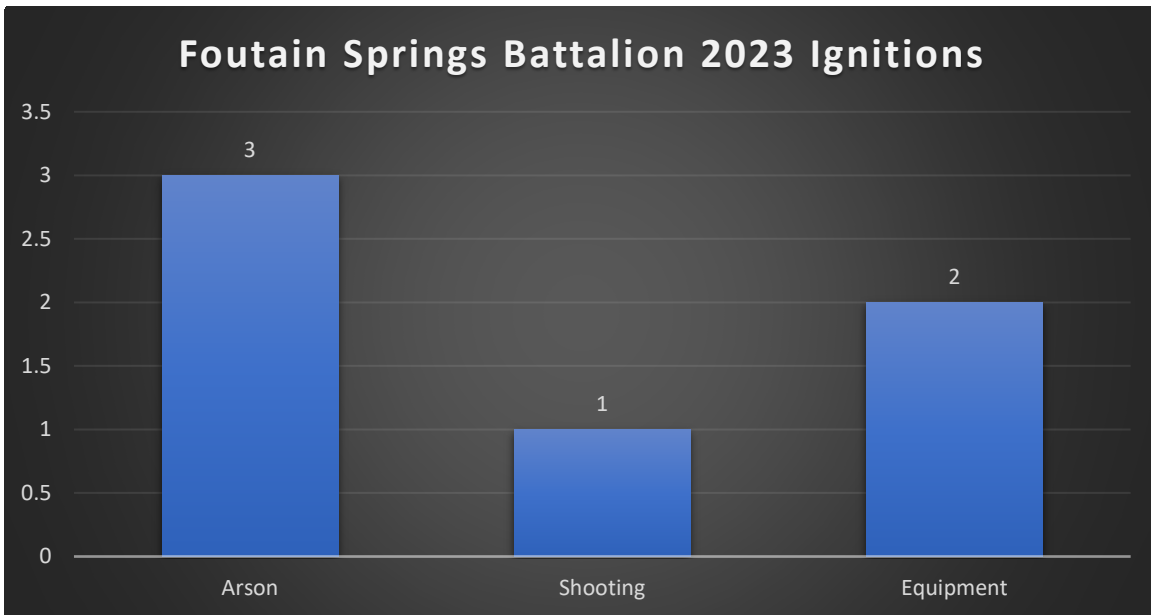


Figure 32 Fire causes in the Fountain Springs Battalion. There were 6 ignitions in the Fountain Springs Battalion.

APPENDIX E: FIRE HAZARD SEVERITY ZONE

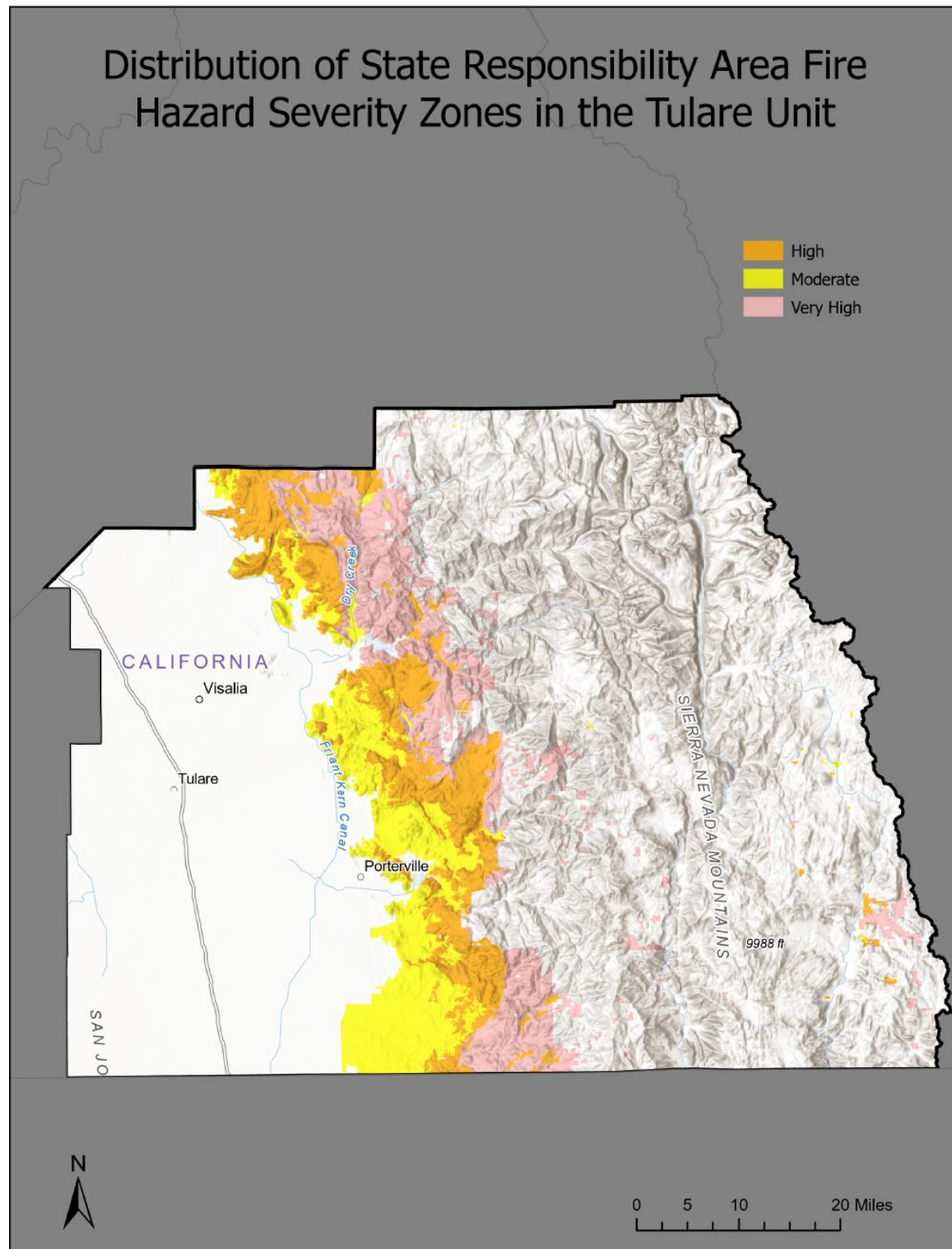


Figure 33 Fire hazard severity zones in Tulare Unit's State Responsibility Area.

EXHIBITS: MAPS

Figure A: Unit Map

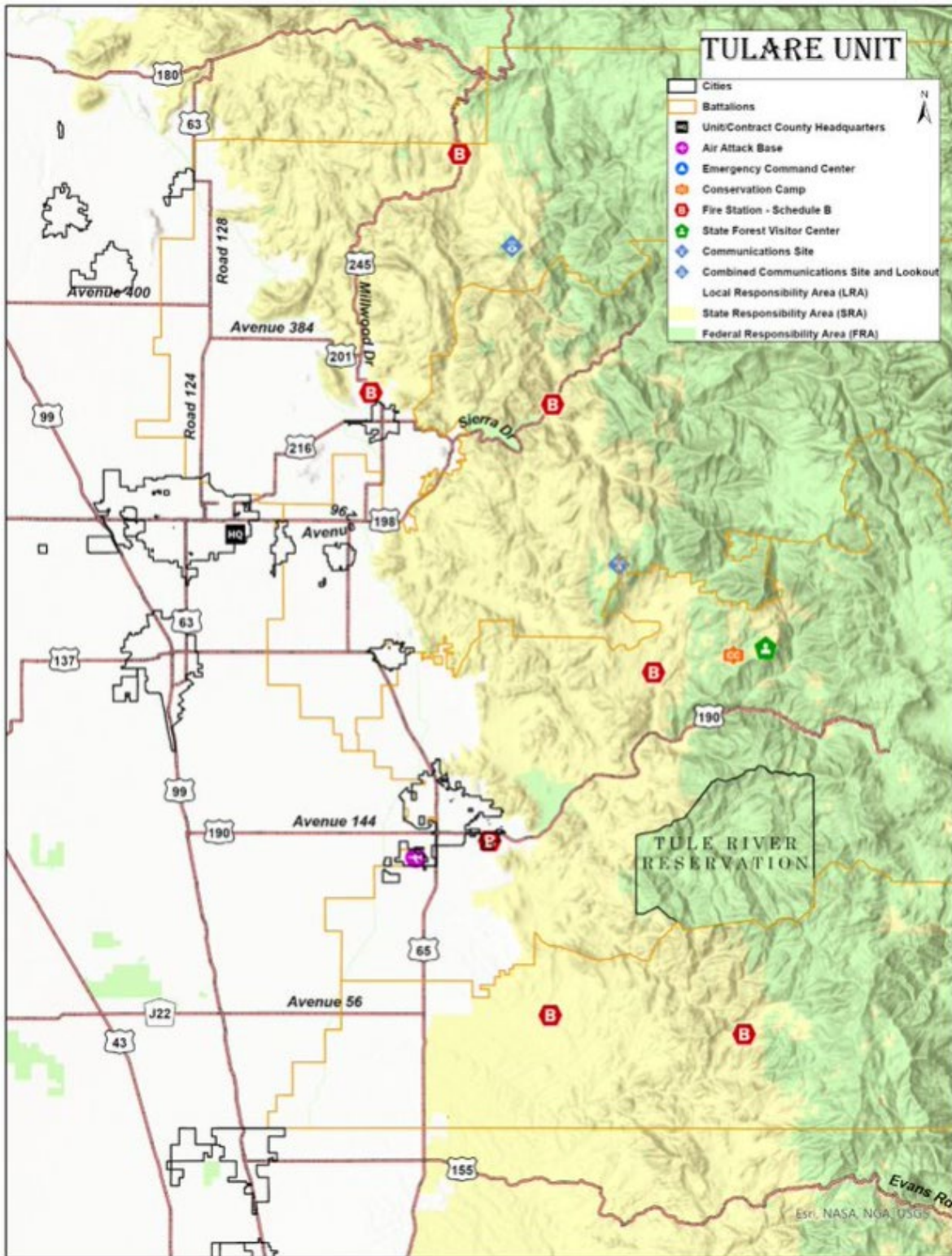


Figure 34 Map of the Tulare Unit

Figure B: Battalion Maps



Figure 35 Map of the Badger Battalion



Figure 36 Map of the Kaweah Battalion



Figure 37 Map of the Tule Battalion

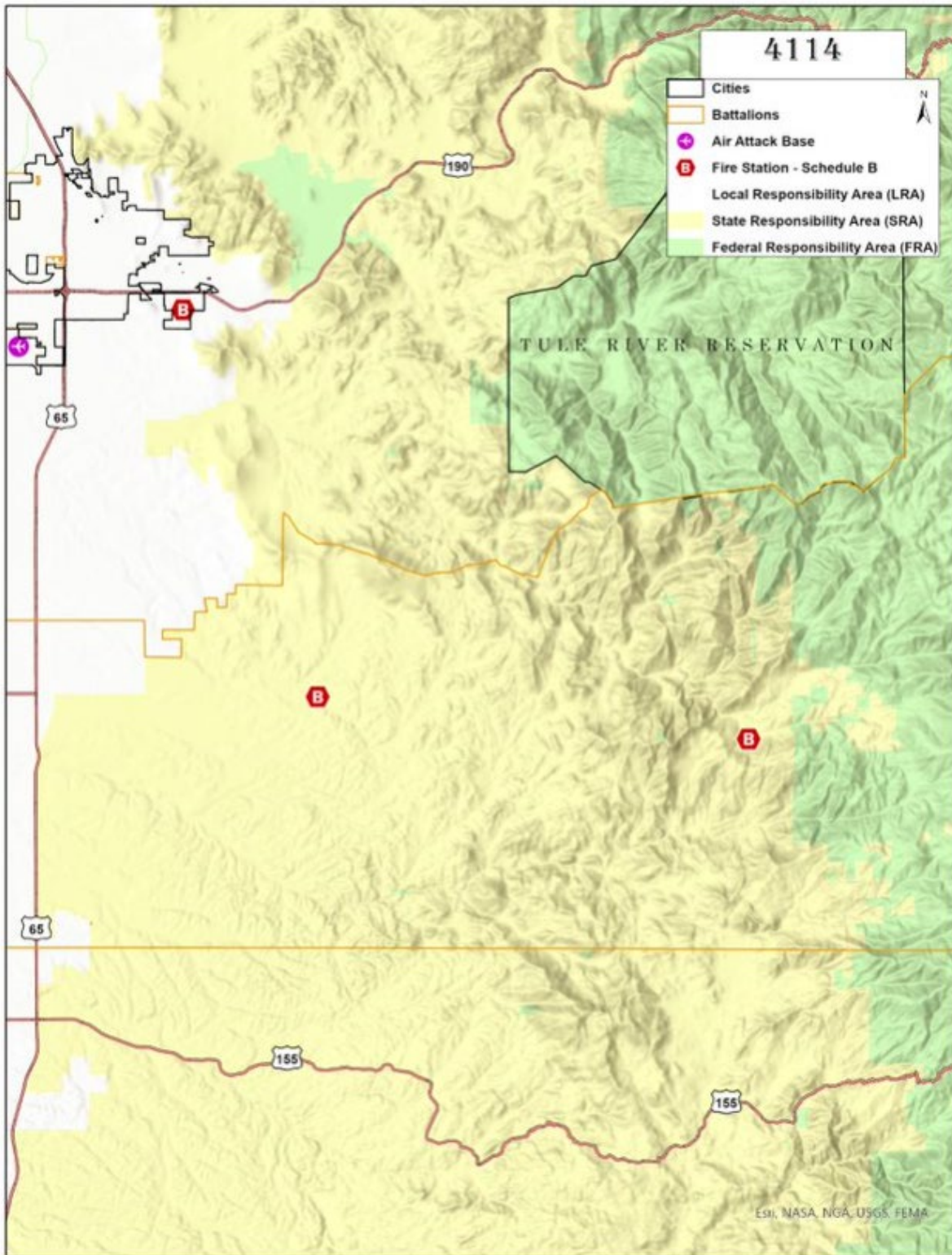


Figure 38 Map of the Fountain Springs Battalion

ANNUAL REPORT OF UNIT ACCOMPLISHMENTS (2023):

Wildland Fire Prevention Engineering:

The Tulare Unit currently has 3 approved VMP'S with a combined total of 20,484 acres that are identified and currently active. The unit has 11 roadside and training burn projects that combine to make up 2,721 acres available for broadcast burning in the year of 2024. Tulare Unit has two proposed VTP's for 8,392 acres. Unit maps have been updated with current response areas and Direct Protection Areas (DPA'S) within the Unit. Battalion maps have been produced identifying project locations and progress demarcations. Pre-Fire management is currently collaborating with local stakeholders and collaborators to produce and distribute brochures which include maps of escape routes within certain geographical areas of Tulare County.

Civil Cost Recovery:

CAL FIRE's Civil Cost Recovery program recovers fire suppression costs when a fire investigation reveals that the responsible party caused the fire negligently or in violation of law. This benefits the State in two ways: it assigns fire suppression costs to culpable parties rather than the taxpayers at large and it serves as a deterrent to carelessness that can result in destructive fires. All fires meeting minimum criteria were forwarded to Southern Region Office for review and civil cost collection.

Education and Information:

In 2023 the Tulare County RCD received an education grant to pay for upgrades to CAL FIRE TUU's one acre fairground exhibit upgrades. The old A frame structure at the fairground was torn down and is being replaced with a new building to replicate a home in the Wildland Urban Interface. This grant will also allow us to update the landscaping for the lot to better demonstrate proper defensible space around structures in the State Responsibility Area. The upgrades will be in place for the 2024 Tulare County Fair.

Vegetation Management:

In 2023, the Tulare Unit treated a total of 1,630 acres from various fuel reduction projects across the county. 1,565 acres of those acres were achieved through broadcast burning. These projects include the Crawford Corral VMP within the Badger Battalion; Gill Range Improvement Burn, Grouse Fire Control Road Right of Way project, Upper Grouse ROW, and the Herbert Burn located in the Kaweah Battalion; Merritt VMP, Porterville Development Center Fuels reduction, Lewis Hill and Rock Plant roadside burns and the Success Burn located in the Tule Battalion; as well as the Posey VMP located in the Fountain Springs Battalion. Additionally, 7 ½ miles of handline was cut along Lake Kaweah in the Kaweah Battalion.

A total of 18,484 personnel hours and 3,420 equipment hours were recorded for the above projects. The scope of work consisted of thinning vegetation, mastication, manual and mechanical piling, limbing and bucking, lop and scatter, pile burning, and broadcast burning.